

The Immortal Life of Henrietta Lacks Summer Reading Packet

- **Background**
 - Read this article for an overview of the book and the importance of the topic in our current society.

Henrietta Lacks, Immortalized

Henrietta Lacks's "immortal" cell line, called "HeLa," is used in everything from cancer treatments to vaccines. A new portrait memorializes her.



Kadir Nelson's 2017 portrait of Henrietta Lacks has been jointly acquired by the Smithsonian's National Portrait Gallery and National Museum of African American History and Culture, and debuted on May 15th, 2018, at the National Portrait Gallery. It will be on view there through November 4th. Lacks's name is somewhat well-known today, thanks to Rebecca Skloot's 2010 book *The Immortal Life of Henrietta Lacks*, which was made into a 2017 HBO film. But Lacks herself, a black woman who died in 1951 at the age of thirty-one from cervical cancer, was obscure for decades. The painting reinforces her presence in this complicated case of medical ethics.

In Nelson's painting, Henrietta Lacks is radiant in a red floral dress, which is missing two buttons. Their absence recalls how cells from her cervical tumor were taken without consent, and developed into an "immortal" cell

line called “HeLa” used in everything from cancer treatments to vaccines. Nelson’s painting, titled Henrietta Lacks (HeLa): The Mother of Modern Medicine, is based on a 1940s photograph of Lacks, and is embedded with symbolism of her posthumous impact. The blue wallpaper behind her involves the “Flower of Life” geometric figure, a symbol of the eternity of space and time.

“As invaluable as HeLa cells are to biomedical progress, Lacks’s story also raises questions about privacy, consent, and inequality in medicine.”

Historian of medicine Jacqueline H. Wolf writes in the *Journal of the History of Medicine and Allied Sciences* that one of the initial uses for HeLa was in developing the polio vaccine, and the cells have since “been used to develop cloning, gene mapping, and in vitro fertilization techniques and to study the effects of an endless array of toxins, drugs, and pathogens on human cells.” Lacks’s long-lived cells can be reproduced indefinitely, making them popular in labs from the 1950s to the present. (A search on JSTOR pulls up hundreds of scientific articles on HeLa research.) A 1976 issue of *Science* declared HeLa the “first established human cell line.”

As invaluable as HeLa is to biomedical progress, Lacks’s story also raises questions about privacy, consent, and inequality in medicine. As Skloot explored in her book, Lacks’s family was unable to afford many of the medical advances supported by research on her cells. “The stories about Lacks and her cells illustrate the inextricability of medical scientific research from social existence as well as cultural production, economics, law, religious beliefs and practices, geopolitics, and pretty much any other aspect of human experience we can think of,” stated writer and academic Priscilla Wald in *American Quarterly*.

In 2013, medical writer Michael McCarthy reported for the *British Medical Journal* that the U.S. National Institutes of Health (NIH) reached an agreement in which Lacks’s family will serve on a new working group to review access to the HeLa’s full sequence data, and that “all researchers who use or generate full genomic data from HeLa cells will be asked to acknowledge Lacks and her family’s contribution to research.”

There were no federal regulations on patient consent for tissue samples in 1951, when Lacks sought treatment at Baltimore’s Johns Hopkins Hospital, one of the few hospitals that admitted black patients (albeit in segregated wards). The use of her cells continues to fuel medical advances around the world. In Nelson’s portrait, she looks directly at the viewer, as if asserting agency over her story, her sunhat framing her head like a halo.

Source

Meier, Allison. “Henrietta Lacks, Immortalized - JSTOR Daily”. JSTOR Daily, 2018,

<https://daily.jstor.org/henrietta-lacks-immortalized/>.

- Family diagram
 - Refer to this image for visual reference of the Lacks family.



- [Vocab list](#)
 - Use this list to check vocabulary terms throughout the book.

The Immortal Life of Henrietta Lacks by Rebecca Skloot

Vocabulary

Chapter 1

1. (pg 1) cervix - the narrow opening at the bottom end of a woman's uterus
2. (pg 2) in vitro - occurring in a test tube or laboratory or elsewhere outside of a living organism
3. (pg 3) genome - the map of an organism's entire genetic makeup
4. (pg 3) haywire - (informal) erratic, unpredictable, out of control
5. (Pg 4) chromosome - a structure found in living cells that contains our genes
6. (pg 13) gynecology—the branch of medical science that deals with the health maintenance and diseases of women, especially of the reproductive organs
7. (pg 15) syphilis—a chronic infectious disease usually sexually transmitted that can affect almost any organ or tissue in the body, especially the genitals, skin, mucous membranes, aorta, brain, liver, bones, and nerves.
8. (pg 16) asymptomatic neurosyphilis—having no symptoms of syphilis. The infection, if it goes untreated, can affect the nervous system, specifically of the brain and the spinal cord. Neurosyphilis is a life-threatening disease. It is a complication of having had syphilis.

Chapter 3

9. (pg 27) biopsy—the removal for diagnostic study of a piece of tissue from a living body.
10. (pg 27) carcinoma-a malignant and invasive epithelial tumor that spreads by metastasis and often recurs after excision; cancer.
11. (pg 27) epithelial-tissue that covers a surface, or lines a cavity or the like, and that, in addition, performs any of various secretory, transporting, or regulatory functions.
12. (pg 28) carcinoma in situ-The term carcinoma in situ is a term used to define and describe a cancer that is only present in the cells where it started and has not spread to any nearby tissues. Carcinoma in situ is the earliest stage of a cancer, and is, at this stage,

considered "non-invasive."

13. (pg 29) hysterectomy-complete removal of the uterus.

14. (pg 29) malignant–cancerous, invasive, or metastatic

15. (pg 29) metastasized-to spread to other parts of the body by way of the blood or lymphatic vessels or membranous surfaces.

16. (pg 33) sickle cell disease—an abnormal red blood cell having an elongated, crescent-like shape due to the presence of an abnormal hemoglobin. (more common in African-Americans)

17. (pg 34) gonorrhea—a contagious, purulent inflammation of the urethra or the vagina, caused by the gonococcus.

Chapter 7

18. (pg 59) conflated—to fuse into one entity; merge

19. (pg 59) eugenicist—someone who studies the improvement in the type of offspring produced; one who studies inherited traits

Chapter 10

20. (pg 79) iron lung—a type of negative pressure chamber or mechanical respirator used to treat polio.



Chapter 12

21. (pg 90) pathologist—a person who chiefly studies the origin, nature, and course of diseases.

Chapter 13

22. (pg 93) epidemic—affecting many persons at the same time, and spreading from person to person; extremely prevalent; widespread

23. (pg 96) Tuskegee Institute—prestigious black universities in the country.

24. (pg 97) Tuskegee Syphilis Studies—the study began in 1932 at a time when there was no known treatment for syphilis, a contagious venereal disease. After being recruited by the promise of free medical care, 600 African American men in Macon County, Alabama were enrolled in the project, which aimed to study the full progression of the disease. In order to track the disease's full progression, researchers provided no effective care as the men died, went blind or insane or experienced other severe health problems due to their untreated syphilis. (unethical)

25. (pg 98) virology—the science dealing with the study of viruses and the diseases caused by them.

Chapter 19

26. (pg 148) castigate—to criticize or reprimand severely; to punish in order to correct.

Chapter 21

27. (pg 163) gangrene—death of soft tissue due to obstructed circulation, usually followed by decomposition and decay.

Chapter 22

28. (pg 173) ubiquitous—existing or being everywhere, especially at the same time; omnipresent

Chapter 33

29. (pg 275) pneumoencephalography—technique of diagnostic radiology that produces X-ray films of the head after injection of air or gas between the membranes lining the brain and spinal cord to sharpen the outlines of various brain structures.

Annotation Directions: For this reading assignment, please create meaningful annotations focusing on diction, syntax, tone, or rhetorical appeals. Please see definitions, examples, and assignment charts below.

1. Interesting/surprising **diction** by the author (word choice, clever phrasing). Be selective with your notes on diction; you can even consider a few thoughtful words. Avoid annotating lengthy passages, especially followed by minimal notes.
2. Interesting **syntax** (sentence construction/arrangement, sentence length, paragraph structure/length). See notes on syntax.
3. A clue to the author's **tone** (phrasing that hints at the author's tone/feeling). Tone words are adjectives. See list of tone words.
4. The significance of **rhetorical appeals**: ethos (speaker's/author's credibility), pathos (emotions/feelings), and logos (logic and reasoning). It is possible that a particular passage could have more than one appeal. See notes on appeals.

DICTION

Paying attention to “diction” means you’re paying attention to word choice. There are lots of ways to say the same thing, but each word has its own unique shade of meaning. When annotating *The Immortal Life of Henrietta Lacks* look for unique, powerful, or unexpected words or phrases. Ask yourself, “Why THAT word?” Why would an author use *that* particular word instead of a different one? What does *that* word do that another one couldn’t?

Quote or passage (with page number)	Annotation
”She had witnessed it enough times with her own eyes: Nana collapsing suddenly, her body tightening, becoming rigid, her eyes rolling back, her arms and legs shaking as if something were throttling her from the inside” (Hosseini 8).	By using words such as “rigid” and “throttling”, Hosseini exemplifies the “presence of the supernatural”, as he uses these words to describe Nana’s Jinn, or possession. The use of “rigid” emphasizes the stillness with which Mariam associated the Jinn with, so much so that her mother froze up. The use of “throttling” shows the reader that Nana is experiencing not only an outburst, but a violent one.

Questions to address in annotations
Did you explain why the author is using this technique? Did you explain how the text evidence (i.e. specific words from the quotation) connects to the desired effect on the reader?

SYNTAX

SYNTAX: The way an author chooses to join words into phrases, clauses and sentences. Students will need to be able to analyze how syntax produces effects. They should first try to classify the kind of sentences used, and then try to determine how the author's choices amplify meaning, in other words why they work well for the author's purpose.

Repetition: duplication, either exact or approximate, of any sentence elements.

Effect: links and emphasizes ideas or creates a sense of rhythm

Sentence Length: the length of a sentence has a strong impact on how it's read, playing with the rhythm and sound of the ideas within the sentence or sentences.

Paragraph Length: like sentences, the length of paragraphs can also make a unique impression that is relevant to its text.

Words strung together – Look for lists of nouns, verbs, adjectives, names, places, or just about anything else to be strung together in sentences, separated by commas. These often work to create a sense of rhythm, provide detailed descriptions, and often impress or overwhelm readers.

(*Example* = Everything about Tiffany was amazing: her hair, her eyes, her ears, her lips, her hands, her face, her shoulders, her kneecaps, and even her feet were all immaculate.)

Sentences strung together – Like words and phrases, sentences can be strung together as well to create various effects. Usually strings of sentences go along with the long or short sentences techniques so that there is a sense of rhythm and a certain degree of flow.

Quote or passage (with page number)	Annotation
"When I was pregnant for the first time. Or maybe the second time. Eighteen, nineteen years ago. Long time, anyhow" (Hosseini 157).	Mariam speaks in short, blunt sentences when referring to the baby clothes she'd given Laila. This shows the desensitization of Mariam to her numerous miscarriages over time, and the use of only a few words, when compared to Hosseini's lengthy description of Mariam's experience during her first miscarriage, helps emphasize Mariam's indifference to the losses she has learned to endure over time.

Questions to address in annotations
Did you explain how the author's choices (literally how the words are formatted on the page) amplify meaning (help us understand the author's purpose)? Did you explain how the text evidence (i.e. specifically how the words are laid out on the page) connects to the desired effect on the reader?

TONE

the **attitude** of the author towards the subject matter. Examine what Loung Ung's attitude toward particular topics seems to be, and consider *why* she would have that tone while discussing those topics. Here is a [list of tone words](#) that will be helpful for this assignment.

Quote or passage (with page number)	Annotation
"There was a leafless tree he climbed every day, where he straddled a branch and watched refugees lying about in the sun, their stores and stumps in plain view. He watched little emaciated boys carrying water in their jerry cans, gathering dog droppings to make fire, carving toy AK-47s out of wood with dull knives, lugging the sacks of wheat flour that no one could make bread from that held together" (Hosseini 217).	The author describes the camp in which Tariq stayed in a desolate tone. The author goes into detail about the day-to-day occurrences and activities in the camp, but describes them with an air of hopelessness, like the inhabitants have no other options. Hosseini uses adjectives such as leafless and emaciated to describe the barrenness of the camp, expressing to the reader the loss of liveliness that Tariq experienced while living there.

Questions to address in annotations
Did you explain why the author is using this technique? Did you explain how the text evidence (i.e. specific words from the quotation) connects to the desired effect on the reader?

RHETORICAL APPEALS: ETHOS / LOGOS / PATHOS

Ethos - author builds credibility & trustworthiness

Logos - the argument itself; the reasoning the author uses; logical evidence

Pathos - words or passages an author uses to activate our emotions

Quote or passage (with page number)	Annotation
"She mourned that she would never get to see Aziza grow up, would not see the beautiful young women that she would one day become, would not get to paint her hands with henna and toss nuqul candy at her wedding. She would never play with Aziza's children. She would have liked that very much, to be old and play with Aziza's children" (Hosseini 241).	Mariam's sentimentality conveys to the reader that she feels badly about never being able to see Aziza grow up. The use of the word "mourned" suggests this, as she uses it to describe the time that she didn't get to spend with Aziza, and describes Aziza so fondly and passionately. This emotion is appropriate for this scene because Mariam is thinking about Aziza before her death. Mariam believed she had no regrets and wanted to endure her death without fear, but the falter in her facade is this sentimentality that she feels the most towards Aziza. This scene is bittersweet, as Mariam feels both this regret and sentimentality for the appreciation of the time she spent with Aziza, and also the craving for more of it.

Questions to address in annotations
Did you explain why the author is using this technique? Did you explain how the text evidence (i.e. specific words from the quotation) connects to the desired effect on the reader?

Complete the annotation charts below.

Type of annotation	Chapter /Page number	Text from the chapter you are analyzing	Your annotation
DICT			

Type of annotation	Chapter /Page number	Text from the chapter you are analyzing	Your annotation
DICT			

Type of annotation	Chapter /Page number	Text from the chapter you are analyzing	Your annotation
SYN			

Type of annotation	Chapter /Page number	Text from the chapter you are analyzing	Your annotation
SYN			

Type of annotation	Chapter /Page number	Text from the chapter you are analyzing	Your annotation
TN			

Type of annotation	Chapter /Page number	Text from the chapter you are analyzing	Your annotation
TN			

Type of annotation	Chapter /Page number	Text from the chapter you are analyzing	Your annotation
ETHOS			

Type of annotation	Chapter /Page number	Text from the chapter you are analyzing	Your annotation
PATHOS			

Type of annotation	Chapter /Page number	Text from the chapter you are analyzing	Your annotation
LOGOS			

The last five annotations are yours to choose from the list of diction, syntax, tone, and rhetorical appeals.

Type of annotation	Chapter /Page number	Text from the chapter you are analyzing	Your annotation

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