

THE IMMORTAL LIFE OF HENRIETTA LACKS

For your summer assignment you will answer questions based on book *The Immortal Life of Henrietta Lacks* by Rebecca Skloot. This non-fiction book will give you an opportunity to learn more about cells and the first “line” of human cells grown outside of the body. It’s a tale of scientific research but may raise questions regarding family, bioethics, race, and ethnicity. For your book review assignment, you will read the book and answer questions from the forward, the chapters, and the afterward.

Here are a few guidelines:

- You must answer at least one question from each chapter, the forward and the afterward.
- Your questions should be typed and submitted digitally at the start of school (Haiku).
- You should delete the questions that you do not answer. Single space your answers, and skip a line between each question.
- All answers must be in your own words using proper terminology.
- Before you turn in the completed assignment, make sure to check for spelling and grammatical errors.
- We will start the 2017-2018 school year with discussion this book, so please come prepared.

Prologue: The Woman in the Photograph

1. What is mitosis? What beneficial biological processes involve mitosis? What happens when there is a mistake during the process of mitosis?
2. According to Defler, how important was the discovery of HeLa cells?
3. As a high school student, Skloot began researching HeLa cells to find out more about Henrietta Lacks. Examine pages 5 and 6 and write down each step that Skloot took to begin her research.

Chapter 1

1. Who was Henrietta Lacks? Review the notes on Henrietta’s medical history found on page 16. Based on the objective details in her medical chart, what can you infer about Henrietta’s life and personality?
2. What did Henrietta’s first doctor assume the source of the lump on Henrietta’s cervix was? What stereotype or bias might this assumption be based upon? What did Howard Jones find “interesting” about Henrietta’s medical history? What does this finding suggest about Henrietta’s cancer?

3. Why did David Lacks take Henrietta to the public wards at Johns Hopkins instead of a closer hospital?

Chapter 2

1. Why did the doctor take a sample of Henrietta's tumor and healthy cervical tissue? What did the doctor hope to prove with the cells?

2. The doctors treated cervical cancer with radium. What is radium? Why is it dangerous? How did Henrietta's body respond to this treatment? Why was it controversial?

3. What was different about Henrietta's second child, Elsie? Compare the medical terms describing Elsie's condition with the terms used by Henrietta's friends and family. What are the connotations of the two sets of terms?

4. How did Pearl Harbor change life in Turner Station?

Chapter 3

1. How are different types of cancer categorized?

2. Explain how the development of the Pap smear improved the survival rate of women diagnosed with cervical cancer.

3. How did doctors justify using patients in public hospital wards as medical research subjects without obtaining their consent or offering them financial compensation?

4. Were cells taken only from black patients? Were black patients generally treated differently from white patients in the early 1950s? Explain your answers.

Chapter 4

1. In the 1950s, doctors had not figured out a way to grow cells outside of the human body. Why did Dr. Gey want to grow cells? Why was it so hard to grow cells outside of the human body?

2. Why is this chapter called "The Birth of HeLa?" How were the HeLa cancer cells different than any other cells in the world?

3. Summarize the main obstacles Gey and his assistants faced in their effort to grow cells.

4. Explain how Gey's roller-tube culturing technique works.

Chapter 5

1. According to Ethel's cousins, why did she dislike Henrietta?
2. What was Elsie's early life like? What specific details let the reader know that sending Elsie away was difficult for Henrietta?
3. Why do you think Henrietta initially chose not to tell people about her cancer diagnosis? What does this decision suggest about Henrietta's personality?
4. What important information did Henrietta's doctor fail to give her before starting her cancer treatment? How did she react when this information was eventually shared with her?

Chapter 6

1. Describe the Tuskegee syphilis study.
2. Describe the Mississippi Appendectomies.
3. Who was Roland Pattillo and why do you think he was protective of Henrietta's family? How is he connected to both Henrietta Lacks and George Gey?
4. How does Day initially respond to Skloot's request for information?

Chapter 7

1. Describe how Henrietta's cancer got worse.
2. What did Gey hope to accomplish with HeLa cells?
3. What did HeLa allow scientists to do for the first time?
4. Who was Alexis Carrel? Why did he win the Nobel Prize?

Chapter 8

1. After her initial round of treatment, what did Henrietta's doctors assume about the effectiveness of the radium therapy?
2. How did her doctors react to Henrietta's intuitive conviction that the cancer was spreading inside of her?
3. When did the doctors realize that Henrietta had been correct about the growth of her cancer?
4. What does the use of the term "a miserable specimen" by Henrietta's doctors reveal about their attitude toward her?
5. While most accounts suggest that Henrietta never met George Gey or knew about HeLa, Laure Aurelian says that Gey recounted meeting with Henrietta before her death. Do you find

this story believable? Use specific facts about Henrietta, Gey, and/or medical practice in the 1950s to support your opinion.

Chapter 9

1. What kind of reaction did Rebecca get when she drove through Turner Point?
2. How does Skloot proceed with her research when it becomes clear that Sonny Lacks is not going to meet with her?
3. Compare and contrast the Turner Station that Skloot visited in 1999 with the Turner Station that Henrietta experienced as a young woman. 6. What does the fact that the town still has “more than ten churches” suggest about the people in Turner Station?
4. Who is Courtney “Mama” Speed, and how is she connected to Henrietta Lacks?
5. What does Skloot realize after watching the BBC documentary about HeLa?

Chapter 10

1. What do the names of the creek and the river suggest about life in Lacks Town?
2. How was Cootie related to Henrietta? What illness did Cootie have as a child?
3. Cootie seems to know and understand a little bit about HeLa cells, but he believes that Henrietta’s spirit is still present in her cells. What does Cootie think about the reason that HeLa cells were used to develop a polio vaccine?
4. Where does Cootie think Henrietta’s cancer came from?

Chapter 11

1. After Henrietta died, the doctors wanted to do an autopsy on her. Why do you think some people do not want to have autopsies and other people do?
2. Describe the progression of Henrietta’s cancer in the eight months between her diagnosis and her death.
3. Why did doctors stop giving Henrietta blood transfusions?
4. What did Henrietta’s friends and family do when they found out that she needed blood? Why do you think they were willing to sacrifice to help her?

Chapter 12

1. Why did Henrietta's doctors need to ask for her family's permission to remove tissue samples after her death? How did Day initially respond to their request?
2. What did Mary, Gey's assistant, realize when she saw Henrietta's painted toenails? How was the timing of this realization ironic?
3. What happened when the family started to bury Henrietta's body?
4. Henrietta's cousin says that Henrietta "was tryin' to tell us somethin' with that storm." What do you think she could have been trying to say?

Chapter 13

1. During the 1950s, polio spread across America. How did Henrietta's HeLa cells help to stop polio? What unusual characteristics of HeLa Cells made them ideal for use in the polio vaccine?
2. Explain how a neutralization test is used to determine a vaccine's efficacy.
3. Paraphrase the explanation of how a virus reproduces found on page 97. Why did the fact that HeLa cells are malignant make them particularly useful in the study of viruses?
4. Why was the development of methods of freezing cells an important scientific breakthrough?
11. Why is standardization important in scientific research?
5. Who profited monetarily from the sale of HeLa cells and other human biological materials?

Chapter 14

1. How soon after Henrietta's death did the media attempt to write about her?
2. What reasons did Berg give for wanting information about the woman whose cells were used to grow HeLa?
3. Summarize the various factual errors that appeared in the stories about HeLa.
4. Why didn't Henrietta's family know that her cells were still alive?
5. In what specific ways do you think that learning of HeLa soon after Henrietta's death might have changed her family members' lives?

Chapter 15

1. What reason did Ethel and Galen give for moving in with Day after Henrietta's death?
2. What did some family members think was the real reason Ethel moved in?
3. Describe the abuse that Joe suffered under Ethel's care. How did this abuse affect him?
4. Describe Deborah's childhood. What challenges did she have to overcome?
5. What questions did Deborah have about her mother and sister? Why do you think no one told her very much about them?

Chapter 16

1. Do you think that researchers and doctors should be able to conduct risky research on people without their consent? Why or why not?
2. What is “informed consent?” Google this one or talk to a doctor to get some help.
3. According to Henrietta’s cousin Cliff, what is “beautiful” about the idea of “slave-owning white Lackses being buried under their black kin”?
4. How are the white and black Lackses related? Who are their common ancestors?
5. How did Henrietta’s family acquire the land that became known as Lacks Town?
6. Compare and contrast the different attitudes the white and black Lacks family members held about race.

Chapter 17

1. Describe the experiment that Southam developed to test his hypothesis about HeLa.
2. Why, specifically, did the Jewish doctors at the Jewish Chronic Disease Hospital object to Southam’s cancer study?
3. What is the purpose of the Nuremberg Code? What events led to it being developed?
4. Explain how the action against Southam and Mandel led to the development of informed consent forms as a standard medical practice.

Chapter 18

1. HeLa cells were unusual in that they were very strong. Give examples of how strong the HeLa cells were and how they could spread.
2. Summarize the various ways that HeLa was used in the space program.
3. Why did a committee of scientists form the American Type Culture Collection (ATCC)?
4. What scientific discoveries were made possible as a result of fused hybrid cells?

Chapter 19

1. How did Bobette respond to Deborah’s pregnancy?
2. How was Joe’s life different from his brothers’ lives? What do you think caused this difference?
3. Analyze the note that Joe wrote to the judge. What does it tell you about Joe’s personality and background?
4. Describe Deborah and Cheetah’s marriage.

Chapter 20

1. What did Stanley Gartler discover about eighteen of the most commonly used cell cultures?
2. What unique abilities did HeLa have that allowed it to contaminate cultures without researchers being aware that contamination had occurred?
3. Why would HeLa contamination be a problem for researchers?

4. What is “spontaneous transformation”? What did Gartler suggest about spontaneous transformation?
5. How did the scientific community respond to Gartler’s theory about HeLa contamination?

Chapter 21

1. Who was Johns Hopkins? Why did he establish the Johns Hopkins’ hospital?
2. Why is Chapter 21 called “Night Doctors?” What did some doctors from Johns Hopkins do in the middle of the night?
3. Give an example of indirect characterization that reveals that the Lacks family distrusts doctors.
4. What do the Lackses believe Johns Hopkins did to black people?

Chapter 22

1. Why did Dr. Gey tell his surgeons to take a sample of his prostate cancer cells? Do you think the doctors should have honored his request? Compare his situation to Henrietta’s situation when Dr. Gey took her cells.
2. What did Howard Jones realize when he reviewed Henrietta’s medical records?
3. What was the purpose of President Nixon’s National Cancer Act?
4. Explain how Henrietta’s real name became public knowledge.

Chapter 23

1. Was it a good thing for the members of the Lacks family that Rebecca Skloot wrote this book? Why or why not?
2. The title of this chapter contains an allusion to the classic horror movie Frankenstein. What does this allusion suggest about the tension between scientific discovery, and public perception and fear of such discoveries?
3. How long had Henrietta been dead when her family found out that her cells were still alive?
4. Why did researchers want DNA samples from Henrietta’s family?

Chapter 24

1. What motivated Michael Rogers to find the Lacks family?
2. How did Rogers discover Henrietta’s real name?
3. Describe Rogers’s interaction with the Lacks family.
4. Paraphrase the paragraph in Rogers’s article that the Lacks family found extremely upsetting. What conclusion did they draw about George Gey and Johns Hopkins?

Chapter 25

1. Summarize John Moore’s story.

2. Describe the lawsuit that set a legal precedent for patenting biological “products” such as cell lines.
3. Summarize the pros and cons of giving patients legal ownership of their cells.
4. What was the Supreme Court of California’s decision regarding the Moore lawsuit. Summarize the reasoning behind the decision.

Chapter 26

1. Describe the changes that had taken place in the lives of Henrietta’s children by 1980.
2. Why did Zakariyya decide to participate in research studies at Johns Hopkins? What is ironic about his participation in these studies?
3. Explain why Gold’s journalism could be considered irresponsible and/or unethical.
4. How have laws regarding medical privacy changed since the early 1980s?

Chapter 27

1. Explain Van Valen’s theory that HeLa cells are “no longer human.” Was his theory accepted by the scientific community?
2. According to Stevenson, why did scientists develop the argument that HeLa cells are no longer human?
3. Explain the Hayflick limit.
4. Why are HeLa cells able to live beyond the Hayflick limit?

Chapter 28

1. What did Deborah hope would happen as a result of the BBC documentary?
2. What motivated Pattillo to organize the HeLa Cancer Control Symposium?
3. What was ironic about the creation of Speed and Wyche’s Henrietta Lacks Foundation?
4. Describe Keenan Kester Cofield. Why did he get involved with the Lacks family?

Chapter 29

1. What specific things did Deborah ask Skloot to promise she would do?
2. Explain the significance of the gift that Skloot delivered to Deborah at their first meeting.
3. What did Deborah hope would happen as a result of Skloot’s research about Henrietta?
4. What information about her mother was Deborah unwilling to share with Skloot? Why do you think she was so protective of this information?

Chapter 30

1. Why wasn’t Skloot excited about meeting Zakariyya?
2. When Skloot met Sonny and Lawrence, they expressed a belief that the medical advances made possible by their mother’s cells are “a miracle.” How do Zakariyya’s beliefs differ from those of his brothers?

3. What does Zakariyya blame on Henrietta's cancer cells? Does Deborah agree with him?
4. What gift does Deborah give Zakariyya? Do you think Zakariyya should be the one to have this object? What does this gift tell you about Deborah's feelings about her family?

Chapter 31

1. What does Deborah say about people who frame her mother's story as a story about racism?
2. Contrast the experience Henrietta's great-grandchildren, Alfred and Davon, have at the Maryland Science Center with the experience Deborah, Sonny, and Lawrence had growing up.
3. How did Skloot finance the research for her book? What did she promise to do for the Lacks family if and when the book was published?
4. Explain why it would be easy to believe that the Marvel super villain, Hela, Goddess of Death, was based on Henrietta Lacks.

Chapter 32

1. Analyze the way that Christoph Lengauer interacts with the Lacks family. Why do you think his interaction is so different from anyone the Lackses encountered at Johns Hopkins up until this point?
2. Describe the way that Deborah and Zakariyya interact with their mother's cells.
3. What important misunderstanding about HeLa does Lengauer clarify for Deborah?
4. What does Lengauer believe about the Lackses' right to be financially compensated for the sale of their mother's cells?

Chapter 33

1. Why was Skloot surprised by the appearance of Crownsville? What do you think she expected to find?
2. Who is Paul Lurz? Which comments of his foreshadow that something terrible happened to Elsie?
3. What part of Elsie's medical records did Lurz have? Why had he saved patients' medical records? Why was he surprised that he had Elsie's records in particular?
4. Describe conditions at the hospital during the time period when Elsie was a patient there.

Chapter 34

1. Why was it important for Deborah to make sure the family were the only people who had Henrietta's medical records and that they not be published in Rebecca's book?
2. Why was Rebecca feeling guilty for all the stress that Deborah was experiencing, both emotionally and physically?
3. What causes the confrontation between Deborah and Skloot? How is it resolved?
4. Why do you think Deborah breaks out in hives after visiting Crownsville and giving Skloot access to the medical records?

Chapter 35

1. How are Gladys and Gary related to Deborah?
2. After witnessing the amount of physical and emotional anguish that Deborah is in,
3. Gary begins to preach and lay hands on Deborah. What burden does he ask to be lifted from Deborah? Where does he ask the burden to be placed?
4. How does Deborah respond after Gary's prayer?

Chapter 36

1. Summarize Gary's spiritual explanation for why Henrietta's cells lived on after her death.
2. Discuss the impact that witnessing the interaction between Gary and Deborah—and later, talking with Gary—had on Skloot?
3. What new perspective did Skloot gain after these experiences?

Chapter 37

1. Why did Deborah decide to go back to school?
2. Why was Deborah unable to attend the National Foundation for Cancer Research's Henrietta Lacks conference?
3. Explain how Davon's heroic actions saved Deborah's life.
4. What obstacle kept Deborah from realizing her dream of returning to school?

Chapter 38

1. What string of events in 2009 suggests that, if Skloot had not begun researching Henrietta's story a decade earlier, it may have been lost forever?
2. At the time of this book's publication, how had the lives of Henrietta's great- and great great-grandchildren been affected by Skloot's research, and by the knowledge and understanding of Henrietta's contribution to science?
3. Skloot begins and ends the book with Deborah's voice. How does this choice impact the reader's experience of the story?

Where They Are Now/Afterword

1. How did Deborah's death change the lives of her brothers?
2. What legal options do the Lackses have? What is their position on suing over the use of HeLa?