

The Immortal Life of Henrietta Lacks Chapter Questions

Type all responses (you may type them on this document, leaving the question and making the answer a different color)

Include the appropriate heading on your typed and printed response page.

Prologue: The Woman in the Photograph

1. What is mitosis? What beneficial biological processes involve mitosis?
2. What simile does Donald DeFler use to describe mitosis?
3. What happens when there is a mistake during the process of mitosis?
4. According to DeFler how important was the discovery of HeLa cells?

Chapter One: The Exam

1. How long did Henrietta wait between first telling her girlfriends that “something didn’t feel right” and going to the doctor?
2. Why does Sadie think Henrietta hesitated before seeing a doctor?
3. 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?
4. Why did David Lacks take Henrietta to the public wards at Johns Hopkins instead of a closer hospital?
5. Explain what the Jim Crow laws were.
6. 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?
7. What did Howard Jones find “interesting” about Henrietta’s medical history? What does this finding suggest about Henrietta’s cancer?

Chapter Two: Clover

1. How was Day related to Henrietta?
2. How old was Henrietta when she had her first child with Day?
3. What was different about Henrietta’s second child Elsie?

Chapter Three: Diagnosis and Treatment

1. How are different types of cancer categorized?
2. Summarize Dr. TeLinde’s position in the debate over the treatment of cervical cancer.
3. Explain how the development of the Pap smear improved the survival rate of women diagnosed with cervical cancer.
4. How did doctors justify using patients in public hospital wards as medical research subjects without obtaining their consent or offering them financial compensation? Do you agree or disagree with their reasoning? Explain your answer.
5. How did TeLinde hope to prove that his hypothesis about cervical cancer was correct?
6. What was George Gey’s position at Johns Hopkins?
7. Explain what an immortal cell line is.

8. Explain how TeLinde and Gey's relationship led to Gey obtaining a tissue sample from Henrietta's tumor.
9. Analyze the consent statement that Henrietta signed on page 31. Based on this statement, do you believe TeLinde and Gey had the right to obtain a sample from her cervix to use in their research?
10. Do you think Henrietta would have given explicit consent to have a tissue sample used in medical research if she had been asked? Do you think she would have understood what was being asked of her? Explain your answers.
11. Were cells taken only from black patients? Were black patients generally treated differently from white patients in the early 1950s? Explain your answers.

Chapter Four: The Birth of HeLa

1. Summarize the main obstacles Gey and his assistants faced in their effort to grow cells.
2. Where did the name "HeLa" come from?
3. Explain how Gey's roller-tube culturing technique works.
4. What happened to the HeLa cells that Mary cultured?
5. Gey chose to give away samples of HeLa to his colleagues almost immediately. Do you think this was a good decision? Explain your answer.

Chapter Five: "Blackness Be Spreadin All Inside"

1. What specific details let the reader know that sending Elsie away was difficult for Henrietta?
2. Why do you think Henrietta initially chose not to tell people about her cancer diagnosis? What does this decision suggest about Henrietta's personality?
3. 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 Six: "Lady's On the Phone"

1. Explain who Rolan Pattillo is. How is he connected to both Henrietta Lacks and George Gey?
2. Paraphrase the information on page 50 describing the Tuskegee Syphilis Study.
3. What do the Tuskegee Syphilis Study and the Mississippi Appendectomies suggest about the history of African Americans and medicine?
4. Why do you think Pattillo agreed to help Skloot contact Henrietta's family?
5. What does Pattillo tell Skloot about Elsie Lacks?
6. What questions does Deborah have about her mother?

Chapter Seven: The Death and Life of Cell Culture

1. What did Gey hope to accomplish with HeLa cells?
2. What did HeLa allow scientists to do for the first time?
3. Who was Alexis Carrel? Why did he win the Nobel Prize?
4. What controversial beliefs did Carrel have?
5. Give an example of propaganda that was used to fuel the public's fear and distrust of tissue culture.

6. What details suggest that Carrel's claims about the immortal cell line were not scientifically sound?

Chapter Eight: "A Miserable Specimen"

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. In your own words, explain the paradox "benevolent deception."
4. When did the doctors realize that Henrietta had been correct about the growth of her cancer?
5. What objective details suggest that Henrietta was in extreme pain at this point in her illness?
6. What does the use of the term "a miserable specimen" by Henrietta's doctors reveal about their attitude toward her?
7. 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.
8. If Gey did speak with Henrietta just before she died, do you think she would have understood what immortal cells were? Explain your answer.

Chapter Nine: Turner Station

1. Who is Courtney "Mama" Speed, and how is she connected to Henrietta Lacks?
2. What does Skloot realize after watching the BBC documentary about HeLa?

Chapter Ten: The Other Side of the Tracks

1. How was Cootie related to Henrietta?
2. 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 Eleven: "The Devil of Pain Itself"

1. Describe the progression of Henrietta's cancer in the eight months between her diagnosis and her death.

2. Why did doctors stop giving Henrietta blood transfusions?
3. 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?
4. What was Henrietta's final request? What does this request tell you about her?

Chapter Twelve: The Storm

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 made Day change his mind and allow the autopsy?
3. What did Mary, Gey's assistant, realize when she saw Henrietta's painted toenails? How was the timing of this realization ironic?
4. What happened when the family started to bury Henrietta's body?

Chapter Thirteen: The HeLa Factory

1. Explain how a neutralization test is used to determine a vaccine's efficacy.
2. What unusual characteristics of HeLa cells made them ideal for use in the polio vaccine trials?
3. Why did the Tuskegee Institute become involved in the mass production of HeLa cells?

Describe the depth of the Institute's involvement.

4. Explain the inherent irony of the fact that the Tuskegee HeLa production lab was operating at the same time that the infamous syphilis study was being conducted. What does the juxtaposition of these two projects reveal about race relations in the early 1950s?
5. 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?
6. Why was the development of methods of freezing cells an important scientific breakthrough?
7. Why is standardization important in scientific research?
8. Why did scientists want to be able to clone cells for research?
9. Explain the contribution that HeLa made to the emerging field of genetics.
10. Describe the role Microbiological Associates played in the development of the field of cell culture, and the industry of selling HeLa cells and other human biological materials.
11. Who profited monetarily from the sale of HeLa cells and other human biological materials?
12. Do you agree with Pomerant's suggestion that Gey should have "finished his own research" before releasing HeLa to the general public?
13. In what ways, if any, did Gey personally profit from the development of HeLa?

Chapter Fourteen: Helen Lane

1. What reasons did Berg give for wanting information about the woman whose cells were used to grow HeLa?
2. How did TeLinde, Gey, and others at Johns Hopkins respond to Berg's request? Why did they respond in this way?
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 Fifteen: "Too Young to Remember"

1. Describe Deborah's childhood. What challenges did she have to overcome?

Chapter Sixteen: "Spending Eternity in the Same Place"

1. How are the white and black Lackses related? Who are their common ancestors?
2. Compare and contrast the different attitudes the white and black Lacks family members held about race.

Chapter Seventeen: Illegal, Immoral, and Deplorable

1. What was Chester Southam concerned that HeLa cells might do?
2. Describe the experiment that Southam developed to test his hypothesis about HeLa.
3. Who were the test subjects in Southam's first study? Were they informed about the research and its risks?
4. What was the result of Southam's first research study? Based on these results, did his hypothesis appear to be correct?
5. Where did Southam find test subjects for his second research study?
6. Based on the results of the second study, what two things did Southam believe that injections of HeLa cells might be able to do?
7. How did Southam justify his decision to inject HeLa cells into patients without their knowledge or consent?
8. What does the term "informed consent" mean?
9. Why, specifically, did the Jewish doctors at the Jewish Chronic Disease Hospital object to Southam's cancer study?
10. What is the purpose of the Nuremberg Code? What events led to it being developed?
11. According to State Attorney General Louis Lefkowitz, what do people have an "inalienable" right to?
12. What was the result of the legal action taken against Southam and Mandel?
13. Explain how the action against Southam and Mandel led to the development of informed consent forms as a standard medical practice.

Chapter Eighteen: “Strangest Hybrid”

1. Summarize the various ways that HeLa was used in the space program.
2. What disturbing discovery did scientists make about the way HeLa responded in orbit?
3. Why did a committee of scientists form the American Type Culture Collection (ATCC)?
4. Explain what happens during somatic cell fusion.
5. Why did scientists want to fuse human and animal cells?
6. What scientific discoveries were made possible as a result of fused hybrid cells?
7. How did the public respond to the idea of cell hybrids? In what specific ways did the media influence the public’s perception of cell hybrids?

Chapter Nineteen: “The Most Critical Time on This Earth is Now”

1. Analyze the note that Joe wrote to the judge. What does it tell you about Joe’s personality and background?
2. What was the lawyers’s main argument in Joe’s defense?
3. How did prison change Joe?

Chapter Twenty: The HeLa Bomb

1. What did Stanley Gartler discover about eighteen of the most commonly used cell cultures?
2. How was Gartler able to link the contamination problem to HeLa?
3. What unique abilities did HeLa have that allowed it to contaminate cultures without researchers being aware that the contamination had occurred?
4. Why would HeLa contamination be a problem for researchers?
5. What is “spontaneous transformation”? What did Gartler suggest about spontaneous transformation?
6. How did the scientific community respond to Gartler’s theory about HeLa contamination?

Chapter Twenty-One: Night Doctors

1. Explain the connection that Sonny makes between his mother’s personality and the ways he believes HeLa cells have been used.
2. What do the Lackses believe Johns Hopkins did to black people?
3. What are “night doctors?” Where did the term originate and why? What do the Lackses believe “night doctors” do? Is their belief based on real events? Explain your answer.
4. Why did Johns Hopkins start a medical school and hospital in a poor black neighborhood? What purpose was the school/hospital intended to serve?
5. What does the 1969 Johns Hopkins study reveal about the researcher’s attitude and assumptions about race?
6. Why is the fact that the Lacks family cannot get health insurance an example of irony?
7. What is the Lacks family’s biggest complaint about the way they have been treated by Johns Hopkins and Dr. Gey?

Chapter Twenty-Two: “The Fame She So Richly Deserves”

1. What type of cancer was George Gey diagnosed with?
2. What specific request did Gey make prior to going into surgery? Why didn't his surgeons honor his request?
3. After finding out that his cancer was terminal, what reason did Gey give for his decision to offer himself as a research subject?
4. Did Gey benefit or profit in any way from his participation in the research studies?
5. What did Howard Jones realize when he reviewed Henrietta's medical records?
6. What was the purpose of President Nixon's National Cancer Act?
7. Explain how Henrietta's real name became public knowledge. Do you agree that Henrietta should have been correctly identified in order to “give her the fame she so richly deserves,” or do you think her anonymity should have been protected? Explain your answer.

Chapter Twenty-Three: “It's Alive”

1. How long had Henrietta been dead when her family found out that her cells were still alive?
2. Why did researchers want DNA samples from Henrietta's family?
3. Did researchers explain why they wanted DNA samples to the Lacks family? Did the family give the informed consent for the research done on those samples?
4. Why did the Lacks family think the doctors were taking their blood?
5. From a legal standpoint, how is the fact that the doctors failed to obtain consent prior to taking blood from the Lacks family in 1973 different from their initial failure to obtain consent from Henrietta in 1951?
6. Why did advances in genetic research necessitate establishing the legal requirement that doctors or researchers obtain informed consent documentation prior to taking DNA samples from patients for research?
7. What does Hsu's request reveal about her attitude towards the Lackses?

Chapter Twenty-Four: “Least They Can Do”

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?

5. Explain how the sale of HeLa evolved into a business. Describe the extent to which the profits from that business are likely a direct result of the sale of HeLa cells. In what other ways do scientists, corporations, and individuals profit as a result of HeLa?
6. What information about the Lackses was published by McKusick and Hsu? Why is the publication of this information troubling from an ethical and legal standpoint?

Chapter Twenty-Five: “Who Told You You Could Sell My Spleen?”

1. Summarize John Moore’s story.
2. Describe the lawsuit that set a legal precedent for patenting biological “products” such as cell lines.
3. Why did Ted Slavin start Essential Biologicals?
4. Why did scientists find the Moore lawsuit deeply troubling?
5. Summarize the pros and cons of giving patients legal ownership of their cells.
6. What was the Supreme Court of California’s decision regarding the Moore lawsuit? Summarize the reasoning behind the decision. Do you agree with the court’s ruling? Explain your answer.

Chapter Twenty-Six: Breach of Privacy

1. Why did Zakariyya decide to participate in research studies at Johns Hopkins? What is ironic about his participation in these studies?
2. In spite of her deliberate decision to not read her mother’s medical records, Deborah Lacks still learned extremely upsetting details about her mother’s illness and autopsy. Describe how Deborah found out about her mother’s painful death.
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 Twenty-Seven: The Secret to Immortality

1. Explain how the human papillomavirus (HPV) causes cervical cancer.
2. Are scientists able to definitively explain why HeLa grew so powerfully?
3. Describe the contribution that HeLa has made to research on the HIV virus and the AIDS epidemic.
4. Explain Van Valen’s theory that HeLa cells are “no longer human.” Was his theory accepted by the scientific community?
5. According to Stevenson, why did scientists develop the argument that HeLa cells are no longer human?
6. Explain the Hayflick limit.
7. Why are HeLa cells able to live beyond the Hayflick limit?

Chapter Twenty-Eight: After London

1. What motivated Pattillo to organize the HeLa Cancer Control Symposium?
2. Carefully reread the speech Deborah gave at Morehouse College, paying particular attention to her repetition of the word “understanding.” Why do you think understanding HeLa was so important to Deborah? What obstacles does she mention as impeding her understanding?
3. Describe Keenan Kester Cofield. Why did he get involved with the Lacks family?
4. How did Deborah discover the truth about Cofield?
5. What did Cofield do when he realized that the Lacks family had blocked his access to their family records? What were the results of his actions?

Chapter Twenty-Nine: A Village of Henriettas

1. What effect did sensationalized journalism and fiction about HeLa and cell cloning have on Deborah? Do you think this was the response that the writers intended?

Chapter Thirty: Zakariyya

1. Zakariyya uses the term “disrespect” to describe Gey’s treatment of Henrietta and the family. Explain the specific reasons why Zakariyya feels disrespected. Do you believe Gey was disrespectful? Explain your answer.
2. What does Zakariyya blame on Henrietta’s cancer cells? Does Deborah agree with him?

Chapter Thirty-One: Hela, Goddess of Death

1. What did Skloot promise to do for the Lacks family if and when the book was published?
2. Who is Franklin Salisbury Jr., and why did he contact Deborah?

Chapter Thirty-Two: “All That’s My Mother”

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. What is Lengauer’s attitude toward the HeLa contamination problem? What belief of Deborah’s does his attitude affirm?
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 Thirty-Three: The Hospital for the Negro Insane

1. Who is Paul Lurz? Which comments of his foreshadow that something terrible happened to Elsie?
2. Why were the hospital’s medical records from the 1950s and earlier disposed of?
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. Compare and contrast the medical research likely performed on Elsie with Gey's research and Southam's research. Does some medical research seem "more wrong"? Why do you think you feel that way?

Chapter Thirty-Four: The Medical Records

1. How can you tell that Elsie's photograph and autopsy are deeply troubling to Deborah?
2. Why do you think Deborah breaks out in hives after visiting Crownsville and giving Skloot access to the medical records?

Chapter Thirty-Five: Soul Cleansing

1. After witnessing the amount of physical and emotional anguish that Deborah is in, 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?

Chapter Thirty-Six: Heavenly Bodies

1. Discuss the impact that witnessing the interaction between Gary and Deborah—and, later, talking with Gary—had on Skloot. What new perspective did she gain after these experiences?

Chapter Thirty-Seven: "Nothing to Be Scared About"

1. What physical ailments did Deborah suffer from as a result of the excitement and stress of seeing her mother's cells for the first time, and learning about Elsie?
2. Why did Deborah decide to go back to school? What obstacle kept Deborah from realizing her dream?
3. Why was Deborah unable to attend the National Foundation for Cancer Research's Henrietta Lacks conference?

Chapter Thirty-Eight: The Long Road to Clover

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?

Where They Are Now/Afterword

1. What legal options do the Lackses have? What is their position on suing over the use of HeLa?

2. If Henrietta Lacks could know how important her cells have been to science, do you think she would approve of the fact that they were taken from her without her knowledge or consent? Explain your answer.