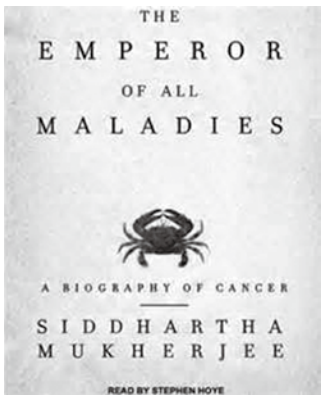


# Unit 1 Medicine

## Preparation

Prepare yourself for this unit by doing research on the given terms or other necessary background information through the Internet and other sources.

Terms	Information	Chinese Version
<p><i>The Emperor of All Maladies</i></p> 		
aspirin		
leukemia		
blasts		
Aleksandr Solzhenitsyn's novel <i>Cancer Ward</i>		
medical gulag		

(Continued)

Terms	Information	Chinese Version
Hodgkin's disease		
Atossa		
William Halsted		
J. B. S Haldane		

## Brain-storming

- 1 How much do you know about cancer? What are the possible causes?  
Is it curable?
- 2 Can you tell a story about someone who has successfully overcome cancer?
- 3 How would a major crisis like cancer affect an individual?

## Text A *The Emperor of All Maladies*

From the Prologue of *The Emperor of All Maladies*

By Siddhartha Mukherjee

Diseases desperate grown  
By desperate appliance are relieved,  
Or not at all.

—William Shakespeare, *Hamlet*

Cancer begins and ends with people. In the midst of scientific abstraction, it is sometimes possible to forget this one basic fact.... Doctors treat diseases, but they also treat people, and this precondition of their professional existence sometimes pulls them in two directions at once.

—June Goodfield

On the morning of May 19, 2004, Carla Reed, a thirty-year-old kindergarten teacher from Ipswich, Massachusetts, a mother of three young children, woke up in bed with a headache. “Not just any headache,” she would recall later, “but a sort of numbness in my head. The kind of numbness that instantly tells you that something is terribly wrong.”

Something had been terribly wrong for nearly a month. Late in April, Carla had discovered a few bruises on her back. They had suddenly appeared one morning, like strange stigmata, then grown and vanished over the next month, leaving large map-shaped marks on her back. Almost indiscernibly, her gums had begun to turn white. By early May, Carla, a vivacious, energetic woman accustomed to spending hours in the classroom chasing down five- and six-year-olds, could

barely walk up a flight of stairs. Some mornings, exhausted and unable to stand up, she crawled down the hallways of her house on all fours to get from one room to another. She slept fitfully for twelve or fourteen hours a day, then woke up feeling so overwhelmingly tired that she needed to haul herself back to the couch again to sleep.

Carla and her husband saw a general physician and a nurse twice during those four weeks, but she returned each time with no tests and without a diagnosis. Ghostly pains appeared and disappeared in her bones. The doctor fumbled about for some explanation. Perhaps it was a migraine, she suggested, and asked Carla to try some aspirin. The aspirin simply worsened the bleeding in Carla's white gums.

Outgoing, gregarious, and ebullient, Carla was more puzzled than worried about her waxing and waning illness. She had never been seriously ill in her life. The hospital was an abstract place for her; she had never met or consulted a medical specialist, let alone an oncologist. She imagined and concocted various causes to explain her symptoms—overwork, depression, dyspepsia, neuroses, insomnia. But in the end, something visceral arose inside her—a seventh sense—that told Carla something acute and catastrophic was brewing within her body.

On the afternoon of May 19, Carla dropped her three children with a neighbor and drove herself back to the clinic, demanding to have some blood tests. Her doctor ordered a routine test to check her blood counts. As the technician drew a tube of blood from her vein, he looked closely at the blood's color, obviously intrigued. Watery, pale, and dilute, the liquid that welled out of Carla's veins hardly resembled blood.

Carla waited the rest of the day without any news. At a fish market the next morning, she received a call.

"We need to draw some blood again," the nurse from the clinic said.

"When should I come?" Carla asked, planning her hectic day. She remembers

looking up at the clock on the wall. A half-pound steak of salmon was warming in her shopping basket, threatening to spoil if she left it out too long.

In the end, commonplace particulars make up Carla's memories of illness: the clock, the car pool, the children, a tube of pale blood, a missed shower, the fish in the sun, the tightening tone of a voice on the phone. Carla cannot recall much of what the nurse said, only a general sense of urgency. "Come now," she thinks the nurse said. "Come now."

I heard about Carla's case at seven o'clock on the morning of May 21, on a train speeding between Kendall Square and Charles Street in Boston. The sentence that flickered on my beeper had the staccato and deadpan force of a true medical emergency: Carla Reed/New patient with leukemia/14th Floor/Please see as soon as you arrive. As the train shot out of a long, dark tunnel, the glass towers of the Massachusetts General Hospital suddenly loomed into view, and I could see the windows of the fourteenth floor rooms.

Carla, I guessed, was sitting in one of those rooms by herself, terrifyingly alone. Outside the room, a buzz of frantic activity had probably begun. Tubes of blood were shuttling between the ward and the laboratories on the second floor. Nurses were moving about with specimens, interns collecting data for morning reports, alarms beeping, pages being sent out. Somewhere in the depths of the hospital, a microscope was flickering on, with the cells in Carla's blood coming into focus under its lens.

I can feel relatively certain about all of this because the arrival of a patient with acute leukemia still sends a shiver down the hospital's spine—all the way from the cancer wards on its upper floors to the clinical laboratories buried deep in the basement. Leukemia is cancer of the white blood cells—cancer in one of its most explosive, violent incarnations. As one nurse on the wards often liked to remind her patients, with this disease "even a paper cut is an emergency."

For an oncologist in training, too, leukemia represents a special incarnation of cancer. Its pace, its acuity, its breathtaking, inexorable arc of growth forces rapid, often drastic decisions; it is terrifying to experience, terrifying to observe,

and terrifying to treat. The body invaded by leukemia is pushed to its brittle physiological limit—every system, heart, lung, blood, working at the knife-edge of its performance. The nurses filled me in on the gaps in the story. Blood tests performed by Carla's doctor had revealed that her red cell count was critically low, less than a third of normal. Instead of normal white cells, her blood was packed with millions of large, malignant white cells—blasts, in the vocabulary of cancer. Her doctor, having finally stumbled upon the real diagnosis, had sent her to the Massachusetts General Hospital.

In the long, bare hall outside Carla's room, in the antiseptic gleam of the floor just mopped with diluted bleach, I ran through the list of tests that would be needed on her blood and mentally rehearsed the conversation I would have with her. There was, I noted ruefully, something rehearsed and robotic even about my sympathy. This was the tenth month of my "fellowship" in oncology—a two-year immersive medical program to train cancer specialists—and I felt as if I had gravitated to my lowest point. In those ten indescribably poignant and difficult months, dozens of patients in my care had died. I felt I was slowly becoming inured to the deaths and the desolation—vaccinated against the constant emotional brunt.

There were seven such cancer fellows at this hospital. On paper, we seemed like a formidable force: graduates of five medical schools and four teaching hospitals, sixty-six years of medical and scientific training, and twelve postgraduate degrees among us. But none of those years or degrees could possibly have prepared us for this training program. Medical school, internship, and residency had been physically and emotionally grueling, but the first months of the fellowship flicked away those memories as if all of that had been child's play, the kindergarten of medical training.

Cancer was an all-consuming presence in our lives. It invaded our imaginations; it occupied our memories; it infiltrated every conversation, every thought. And if we, as physicians, found ourselves immersed in cancer, then our patients found their lives virtually obliterated by the disease. In Aleksandr Solzhenitsyn's

novel *Cancer Ward*, Pavel Nikolayevich Rusanov, a youthful Russian in his mid-forties, discovers that he has a tumor in his neck and is immediately whisked away into a cancer ward in some nameless hospital in the frigid north. The diagnosis of cancer—not the disease, but the mere stigma of its presence—becomes a death sentence for Rusanov. The illness strips him of his identity. It dresses him in a patient's smock (a tragicomically cruel costume, no less blighting than a prisoner's jumpsuit) and assumes absolute control of his actions. To be diagnosed with cancer, Rusanov discovers, is to enter a borderless medical gulag, a state even more invasive and paralyzing than the one that he has left behind. (Solzhenitsyn may have intended his absurdly totalitarian cancer hospital to parallel the absurdly totalitarian state outside it, yet when I once asked a woman with invasive cervical cancer about the parallel, she said sardonically, “Unfortunately, I did not need any metaphors to read the book. The cancer ward was my confining state, my prison.”)

## I Points and Structure

**Task 1** Listen to the audio clip and note down the information about the given items. Then recap it to your classmates.

Items	Information
Carla Reed	
leukemia	
cancer	
Nikolayevich Rusanov	

**Task 2** Listen to the audio clip for a couple of times and answer the following questions.

1. Why did the author make such a detailed description of commonplace particulars of Carla's experience?
2. What was the role of "I" in the narration?



3. When the author said “The illness strips him of his identity”, what did he mean by “identity”?

## II Words and Expressions

**Task 1** Blank Filling: Fill the blanks with appropriate variations and phrases of the given words.

terrify

1. In its most acute form it produces abrupt and \_\_\_\_\_ hallucinations, disturbing to victims and onlookers alike, which generally then give way to coma and death.
2. To other hominids, Homo erectus must have seemed \_\_\_\_\_ powerful, fleet, and gifted.

consume

1. Cancer was an all-\_\_\_\_\_ presence in our lives.
2. It was Einstein who provided the first incontrovertible evidence of atoms' existence with his paper on Brownian motion in 1905, but this attracted little attention and in any case Einstein was soon to become \_\_\_\_\_ his work on general relativity.
3. Even though lead was widely known to be dangerous, by the early years of the twentieth century it could be found in all manner of \_\_\_\_\_ products.
4. Work on a single bacterium could easily \_\_\_\_\_ a year.

critical

1. The third option is that gravity is just right—“\_\_\_\_\_ density” is the cosmologists’ term for it—and that it will hold the universe together at just the right dimensions to allow things to go on indefinitely.
2. In between the big kill-offs, there have also been many smaller, less well-known extinction episodes, which were not so devastating to total species numbers, but often \_\_\_\_\_ hit certain populations.
3. Other elements are \_\_\_\_\_ not for creating life but for sustaining it.
4. Partly to placate its \_\_\_\_\_, the Navy provided funding for a more advanced submersible, to be operated by the Woods Hole Oceanographic Institution of Massachusetts.
5. The specifics of Mary’s \_\_\_\_\_ are too technical to need extensive airing here.

parallel

1. Solzhenitsyn may have intended his absurdly totalitarian cancer hospital to \_\_\_\_\_ the absurdly totalitarian state outside it, yet when I once asked a woman with invasive cervical cancer about the \_\_\_\_\_, she said sardonically, “Unfortunately, I did not need any metaphors to read the book. The cancer ward was my confining state, my prison.”
2. Both diseases, as Sontag pointedly noted, were similarly “obscene—in the original meaning of that word: ill-omened, abominable, and repugnant to the senses.” Both drain vitality; both stretch out the encounter with death; in both cases, dying, even more than death, defines the illness. But despite such \_\_\_\_\_, tuberculosis belongs to another century. TB (or consumption) was Victorian romanticism brought to its pathological extreme—febrile, unrelenting, breathless, and obsessive.
3. To confront cancer is to encounter a \_\_\_\_\_ species, one perhaps more adapted to survival than even we are.