are fun and memorable: bedtime nature field guides instead of nursery rhymes, 3 a.m. meteor showers, owl pellet and palm tree experiments, a lecture on quantum physics at the age of 8.

Each of the paragraphs provides a glimpse of Ariela's life growing up. This chronological ordering is clear and effective, helping to move the essay from past experiences to future aspirations. Ariela's use of turning points helps drive the narrative along. For example, she describes the realization in first grade that her parents no longer love each other; then she tells about her Aunt Diane's death, which helped her see that she "could use [her] natural love of science to benefit others." The subsequent examples, which are somewhat list-like, nonetheless show us ways in which Ariela has applied science to health issues. Her experience at the Riejo Pera Lab best supports this point. Ariela might have chosen to write more about her summer internship at Stanford as an iconic project rather than listing so many others. For instance, it is unclear what the COSMOS program is, though she may have written about this elsewhere in her essay.

The end of Ariela's essay provides an excellent, succinct summary that directly addresses the essay questions. Through mentioning her parents, she describes her "world," and through stating her intention of becoming a biomedical researcher, she shows how the two major themes in her essay—a love for science and desire to help people—are related.

"Researching Cancer"

Anonymous
Harvard University

I TROD THE MUD IN THE misty spring rain. It was Qing Ming, the holiday in China when we honored our deceased ancestors. On the ground of the cemetery, drenched flowers lay in my grandfather's remembrance. That morning—a month before my sixth birthday—I clung tightly to my mother's sleeves and finally learned why he passed away.

My grandfather had been a victim of cancer. Because the diagnosis came too late, all treatment was futile. As my mother whispered this to me with grief in her eyes, I stomped angrily in the mud. I blamed the doctors who couldn't find the tumor in time to save him. That rainy morning launched my dream to help cure cancer—a common wish, but one that fueled a life-changing pursuit. Knowing that the best pro-

tection against cancer was to detect it as early as possible, I examined the widely used methods of detection. I read about mammography and was astounded to learn that it failed to detect a large percentage of cases. As I wondered how to make detection more accurate, I heard about a research internship program at ____ Cancer Center. I jumped at the opportunity.

There, my mentors encouraged me to investigate cancer's genetic causes. I became intrigued by a gene suspected to play a role in the onset of breast cancer. We examined a process of gene-silencing—known as methylation—that changed DNA structure while keeping the sequence itself intact. Through a series of assays, we pinpointed the methylated sites in the gene sequence that distinguished cancerous breast cells from healthy cells. These were markers of disease!

The thrill came from knowing the vast clinical applications of the discovery. Finding such markers is a step toward the individualization of cancer treatment. Genomics-based diagnostics would detect cancer earlier than traditional procedures. Also, since methylation does not change the DNA sequence, it is reversible. Therapeutics could target these sites and minimize harm to healthy tissue.

Personalized cancer diagnostics promise a new dawn, but they are not yet reality. Many more genes need to be studied before we can fully comprehend the roots of the disease. Awed by the complexity of cancer, I realized that my dream was much more intricate than I imagined. However, my youthful passion in medicine did not dwindle. Instead, it strengthened and matured into a strategy. As my vague goals shaped into specific inquiries, my curiosity became insatiable. The joy of uncovering the unknown affirmed my love for science. My generation will keep pushing the boundaries of knowledge, and nothing would give me more fulfillment than continuing to fight in the war on cancer.

I recall that rainy Qing Ming morning when I gazed at my grandfather's gravesite. I wish I could tell him about the adventure he inspired. This war will be arduous, but every little "eureka!" along the way is a portent of victory.