5

CAREER

"Puzzles"

Anonymous
Harvard University

WHEN MY GRANDMOTHER CAME TO VISIT five years ago, she brought me a 3,000 piece jigsaw puzzle. To most, this would not sound very exciting—it would be almost as bad as a shirt saying "My grandparents went to India, and all they bought me was this stupid shirt." My reaction to the puzzle was different. I cut open the cardboard box as soon as I could, and poured the pieces out onto my puzzleboard. I worked patiently on the puzzle for hours at a time, my excitement building as more and more of the picture was revealed. I cut down my sleep time until the image of a picturesque forest was complete. The puzzle overshadowed all else in my life, if only for that short period of time.

Working on puzzles has helped me gain focus, determination, and patience. I have learned to apply these qualities to every task I face, dealing with the outside world in the same fashion as I would a puzzle. My love for science stems largely from this; science requires the same logical and levelheaded approach that a puzzle does, and as evidenced

by the many puzzles decorating my house, this is an approach which suits my skills and temperament. This intellectual stimulation, coupled with a desire to discover more about life's mysteries, compels me to pursue a career in scientific research.

This summer, I worked in a cardiology laboratory at UCLA, looking at proteins associated with HDL to understand how atherosclerosis can be averted. After some experiments provided questionable results, I was given the task of confirming that the viruses we were working with had been packaged and identified correctly. I spent weeks running DNA gels, looking for specific genes in each virus, but my results were inconsistent. I was frustrated, but instead of giving up on my assignment, I was even more determined to find an explanation. I considered every aspect of the experiment, working backwards until I reached the source—the primers I had used to amplify the DNA were nonspecific and ineffective, and thus useless in distinguishing the three genes of interest to us. Knowing this, I was able to alter my experiment accordingly, looking at protein content instead of DNA sequences. I finally showed that two of the three viruses were correct; the third, however, needed to be repackaged. My work was crucial to the undergraduate student I was working with, because he was able to redesign his experiment to account for this third virus.

Working in a lab was an exhilarating experience for me. Even though I gave up lying on the beach to instead play with viruses and chemicals, the compulsion to understand these proteins inspired and motivated me. I am tremendously proud of the piece I contributed to the atherosclerosis puzzle: a small piece, but integral nonetheless. The sense of accomplishment I felt because of my work in the UCLA lab was much the same as that which I felt upon completing the 3,000 piece puzzle my grandmother gave me. This feeling is one I hope to experience throughout my life, because the atherosclerosis puzzle is most assuredly not the last such puzzle I will work on.