#### SAMPLE PERSONAL STATEMENTS

## Strategy 1: Emphasis on inspiration and goals

Fellowship recipient, B.S. In Biology; Medical School

I was going to be late. At this point, the clock on my dashboard all but dared me to think otherwise. Regardless, I kept glancing at the shoulder of the . . . freeway, thinking that if I got out and ran I would just make it in time to set up the event. Since the car was not moving, I decided to go over my speech. It wasn't much, just a few words jotted down to commemorate the moment: "I would like to welcome all of you to the first orientation session for the Collegiate Med Volunteers. It is our hope that this program will allow you first-hand experience in the medical field while also serving to lighten the load of an overworked county hospital staff..." After the first two sentences, I stopped reading, accelerated two feet forward, and anxiously stuffed the crumpled sheet back into my pocket. The volunteer program that I had been developing for four months was finally coming to fruition.

Sitting in the smog-filtered summer heat, trapped in my car, I began to ask myself, "Why am I parked on this freeway; inching toward a hospital, at seven in the morning?" The ready answer was an overheated Ford, 100 car-lengths in front of me. But it was more than that. The real answer was evident as early as my sophomore year of high school.

At the age of sixteen, I was hired as an intern in the [city hospital's] Pediatrics Program. I had the opportunity to observe surgeries and births, to watch doctors taking histories, and to shadow medical residents through five departments of a medical center. . . . No matter how much time I had spent in the hospital, nothing could have prepared me for my first true introduction to medicine. While I was working in the Pediatric Emergency Room, doctors asked me to help calm a girl as they evaluated the eight-inch laceration running down her leg.

I wanted to get her mind off the pain, so I took her hand and started talking. We spoke of everything, from "The Mighty Morphin' Power Rangers" to her feelings on starting the first grade. She had just had her sixth birthday, pizza was her favorite food, and she loved the color blue. As we got to know each other, the child slowly dropped her defenses, allowing the anxious doctors to examine her wounded leg. Then the exam room filled with the sound of incomprehensible medical terminology and the commotion of nurses rushing in and out. Our link was suddenly broken. She sat up and saw a nightmare of suturing needles and scissors playing out in front of her. The nurses hurried to restrain the girl as she jerked violently and began helplessly flailing her arms. I grasped hold of her hand and spoke calmly into her ear. Finally, tired from the struggle, she surrendered to the sound of my voice. We were once again connected. The doctors continued to work while we fell back into our conversation of toys and ice cream.

Still waiting on the freeway, I knew why I was driving to the hospital. Within those few moments, a six-year-old showed me medicine's capacity for compassion. I was stunned. . . . Before joining the Pediatrics Program, [I had]. . . far underestimated the significance of patient contact. [Now] . . . my heart directed me toward a career in medicine.

It was not until I returned to the hospital environment as a college student that my mind found inspiration in the future my heart had envisioned. After completing a year in college, I joined a study centered around reducing the occurrence of intra-abdominal adhesions, a common post-operative complication. I dealt with rats instead of humans, worked in a lab rather than an exam room, and buried myself in research articles in place of hospital charts. Most importantly, though this was my second real introduction to medicine. As a high school student, my choice to become a physician was based in large part on the clinical side of the profession. This research project reinvigorated my desire to study the sciences. I tested fibrin glue as a therapy for adhesions, performed surgical procedures on lab animals, helped with statistical analyses, and read through reams of previous research. Summer passed quickly as the pursuit took hold of my imagination. Some days, I would spend hours sitting with a medical dictionary propped in my lap, cross-referencing terms from old papers. By the time the study drew to a close, I realized that it was my appreciation for both the emotional and intellectual aspects of medicine that cemented my future as a physician . . . .

After about thirty minutes, I found myself, once again, staring down the packed corridors of a hospital. My watch reading 7:45, I barely had a chance to set up chairs before the ninety-two new volunteers began to filter into the auditorium. When it came time for me to speak, I did not need the crib sheet that was stuffed into my pocket. I knew why I was there, and more than anything else, I was excited.

## Strategy 2: Emphasis on academic study and research

Fellowship recipient: B. S. in Geology; Bachelor of Letters; Ph.D. in Geology

My entry into the School of Geology and Physics coincided with a year of hard work as a contributing editor of . . . a student journal. Many of my colleagues at the journal were activists who deplored the policies of the same oil companies that have long funded the [university]. Thus I became cognizant of my own scientific training as one small, potentially beneficent ramification of a global industry with a profound economic, political, and environmental footprint. . . .

[I have omitted a paragraph explaining the importance of microbial populations underground and the potential for future research. "The consequences propagate through science, society, and even fantasy."]

...since the summer of 2000, I have been working and studying under ... a low-temperature geochemist and ... an environmental microbiologist. Together with a few other students, we conducted research on a sulfide-bearing spring ... After a series of field trips and laboratory experiments, our team concluded that photosynthetic sulfur bacteria played an important role in the precipitation of barite minerals at [this] ... site. I created a poster summarizing our research and presented it at the winter 2000 conference of the American Geophysical Union. Subsequently the investigation became a paper that is currently under review at the journal *Science*.

In the past year, my grasp of geology as a whole has improved through intensified course work and [participation in a] summer field course . . . My six weeks at field camp in a class of only

five students gave me a rich survey of geologic vocabulary and field practice. This spring, I am writing an honors thesis based on a kinetic model of the deposition of . . . rose rocks. Meanwhile, I will complete my degree in Letters, as well as the final project from an honors English class called "Science and Cultural Texts," which examined science from a variety of perspectives (historical, literary, philosophical, sociological). For the final project, I conducted a series of interviews with the professors at field camp; based on those sessions, I am writing a characterization of their various relationships to the plate tectonic revolution in geology. This project reflects an awareness I plan to maintain throughout my career: that of science as a powerful social phenomenon that can be viewed and criticized from without.

# **Strategy 3: Emphasis on qualifications and potential professional contributions** Fellowship recipient, B.S. in Elementary Education; Law school

... my experience in the classroom and my recognition of the need for change is my true motivation for studying in this field of law. Recently at an educational form at [my university] . . I realized how uncommon my perspective is in this field, having actually taught in the classroom myself. I have been on all sides – student, teacher observer. While at this forum I listened as the others in attendance, mostly students in the social sciences shared their ideas and opinions about current issues in education. I was amazed at the many misconceptions about public education that were presented, and was moved to share my own experiences...

I have seen firsthand the struggle between policy makers and the teachers during my student teaching placements, and I want to work towards helping resolve these conflicts. . . . I believe I can act as a bridge between legislators and teachers. . . . All of my top three law school prospects offer the chance to delve deeper into issues like reforming public school conditions, high stakes testing, school desegregation, school financing, educational planning, and administration. I hold in my hands the unique opportunity to affect more than just the students I would have worked with hands-on as a teacher . . . if I can make an impact on educational policy.

### **Strategy 4: Combination approach**

Fellowship recipient, B.S. in Statistics, B.A. in Economics, B.A. in Political Science, B. S. in Multidisciplinary Studies; Joint program for master's in public policy and law school

Weeds tickling my feet as I kicked rhythmically to stay afloat, I surveyed the stars in the Siberian sky. Water lapped calmly at my shoulders. Moonlight illuminated my Russian companions. I had spent recent weeks helping a school in Kizhenga village to start a student-run wool blanket-making business and been struck by the scarcity of opportunities for young people. I had traveled to Ulan-Ude to present a paper on service-learning and sustainable development at an international conference and encountered Russian scholars struggling against apathy in their communities. Today I had helped the Baikal School of Leaders facilitate team-builders for children at Camp Chiromoshki, in whose lake we now relaxed, and had been disturbed by the kids' distrust of the concept of leadership. "I can't believe I'm really here," I thought. In hindsight, I cannot believe how much "here" was like . . .[my home town].

[Name of town] is the stoplight-less . . .[rural] community where I grew up – in the same old farmhouse where my grandfather was born. I was raised on a . . . farm, but to be honest, I never

really liked getting my hands dirty. I knew early that academics, not agriculture, would be my strong suit.

From the start, I excelled at school. The school system, however, was saddled with the self-defeating pessimism that accompanies decades of insufficient funding and frequent appearances atop statewide dropout lists. Few of my classmates considered college, and I was often ridiculed for being an "overachiever,"... My family had fostered my drive to succeed, but even as I graduated as valedictorian and entered [college] on an academic scholarship, my schooling had left me unsure of my preparedness and certain the schools had served others even less.

I chose majors in Statistics (for its emphasis on problem-solving and research) and Political Science (because of my curiosity about public policy and law). Yet outside the classroom, I consistently gravitated toward familiar themes. I joined (later led) SATELLITE, a student-run initiative that combats limitations often associated with rural areas by providing enrichment opportunities to students from underserved high schools, and discovered, not surprisingly, a passion for the cause. . . .[Through this work] I saw the potential for properly crafted education to help young people see themselves as empowered citizens, a perspective I thought was missing at home.

Accordingly, I designed a third major in Multidisciplinary Studies to analyze education as a force shaping solutions to the social, political and economic challenges facing rural communities. Then, intrigued by the upper-level course work I had taken toward a minor, I resolved to pursue a full-fledged degree in Economics. . . .

Then last summer I lived among the Buryat people of central Siberia, working with villagers to develop revenue-producing micro-enterprises as laboratories for learning market principles. Exploring the role of education in developing societies, I discovered new questions: Are we educating people to make responsible, sustainable choices? To be consumers or citizens? To provide leadership for social change? As I hiked through the villages around Lake Baikal on the International Green Walk (a sustainability project), I encountered familiar dynamics: disillusionment, scarce opportunities, schools inadequately nurturing citizenship. A rural populace with limited resources unable to mobilize against deteriorating communities and economic hardship because of little communal pride and low expectations – the parallels with [my home town] were unsettling. I returned home with a renewed commitment to rural citizens.

Graduate school is the next step in fulfilling that commitment. I want to create a niche at the intersection of public policy and the law where I can effectively work for equity and opportunity for rural citizens . . .

Writer Somerset Maugham once said, "It's a funny thing about life – if you refuse to accept anything but the best, you very often get it." My childhood was filled with the feeling of warm mud squishing between my toes as I trotted barefoot behind my grandfather through well-tended fields; I know first-hand the positives rural communities offer. But rural areas here and abroad also face characteristic limitations. As a result, too many young people in rural communities unknowingly accept less than their best. I have struggled my whole life against the notion that small towns have to produce small minds and small opportunities. Effectively supporting others

in that struggle requires new modes of thinking, new modes I plan to develop in my graduate study.

Strategy 5 (Variant of Strategy 2): Emphasis on research projects – Engineering student Fellowship recipient, B.S. Electrical Engineering; Ph.D. in Biomedical Engineering

Gordon Brown, former Dean of Engineering at MIT once said, "Engineers operate at the interface between science and society." While all engineering disciplines use scientific discoveries to solve practical problems, biomedical engineering is unique. It integrates aspects from classical engineering disciplines with biology in order to develop technologies that will lead to advances in health care. I am drawn to biomedical engineering because of the potential to use my engineering skills in the medical field to improve and lengthen the lives of many people.

I chose electrical engineering as my undergraduate major because I like science, math, and technology, but my first exposure to biomedical engineering taught me that there is much more to engineering than building toys. The summer after my first year of college, I worked at the IBM Watson Research Center in New York. During my internship, I helped develop an optoelectronic monitoring system for laser skin resurfacing. I enjoyed the technical aspects of my job. However, knowing that my work had the potential to help people suffering from disfiguring scars was the most satisfying part of the experience.

I worked at IBM the following summer as well . . . [After transferring to another university where there were increased research opportunities], I continued my electrical engineering studies, but my research had direct applications in biomedical engineering. I . . . became involved in a mid-IR laser spectroscopy project . . . I helped construct a system capable of measuring extremely low concentrations of various gases, a technology that can be used to detect certain biological indicator molecules in exhaled breath whose presence provides clues to biochemical reactions taking place in the body. Through collaborations with [a medical school], we received breath samples from lung transplant patients. By measuring levels of carbonyl sulfide in the breath, we hope to develop a method for early detection of lung transplant rejection. My work led to a publication in the journal *Analytical Chemistry* and to presentations at the

4<sup>th</sup> International Tunable Diode Laser Conference in Zermatt, Switzerland, and the Laser Applications to Chemical and Environmental Analysis Conference in Annapolis, Maryland.

Besides finding new research interests . . ., I became an active member of the Institute of Electrical and Electronic Engineers... One of the purposes of IEEE is to promote awareness of science and electrical engineering in the community, especially among high school students. In order to enhance technical understanding among students and faculty, IEEE sponsored three lectures on relevant topics in electrical engineering last semester that I organized. . . .

During this time, I also participated in a research project in the Department of Civil Engineering. I decided to undertake this project . . . because of my experience in Numerical Methods, one of my favorite undergraduate courses. Under the guidance of . . ., I designed and wrote a program in Mathematica to display transient, two-dimensional velocity fields produced by the ADCRIC hydrodynamic model, a finite element model of oceanic flow developed by the Army Corps of

Engineers. From this experience, I obtained knowledge of numerical modeling and computer programming that I hope to use in my graduate studies.

My research, leadership activities, and electrical engineering courses have prepared me well for graduate studies in biomedical engineering. From the variety of research experiences in which I have participated, I understand the combination of creativity and diligence required for a successful research project. My academic record reflects my technical competence, providing a strong foundation for future engineering research, and, from my extra-curricular activities, I realize the importance of humanity in engineering.