

Name: \_\_\_\_\_ Band: \_\_\_\_\_ Date: \_\_\_\_\_

## **What it Takes: Becoming a Doctor**

<http://careers.stateuniversity.com/pages/905/What-It-Takes-to-Be-a-Doctor.html>

### **The First Four Years**

Aspiring doctors spend the first four years of college earning their bachelor's degrees. Many students consider themselves "premed," which means taking a curriculum that is heavy in science and math. Premed students study such things as physics, chemistry, and biology, and take other advanced mathematics and science courses. During this time students often volunteer or work part-time in hospitals, clinics, or doctor's offices, so they can gain knowledge and experience.

When premed students are in their third or fourth year of college, they apply to medical school. There are nearly 150 medical schools in the United States, and acceptance to these schools is highly competitive. Students must achieve a high score on an examination called the Medical College Admission Test (MCAT). They must complete an essay to explain why they want to be a doctor. Many schools require letters of recommendation. Also, the grades the students have earned in college are an extremely important consideration. Medical students almost always have grade point averages of 3.5 or higher.

### **Intensive Study**

Once students are admitted into medical school, they spend the first two years on what is often called "heavy book learning." They attend classes in anatomy, biochemistry, and physiology. They study pathology, medical ethics, and laws that govern medicine. They learn about the human body and how it works. They learn about disease and how the human immune system fights disease. They also study pharmacology, which is the science of medications.

During the second year, students begin to learn about basic medical tasks. This includes learning how to examine patients, how to take medical histories, and how to diagnosis certain illnesses.

### **Learning on the Job**

The third year of medical school is when students do their clinical rotations, which means they work with doctors and other health care professionals. They observe and assist internists, surgeons, and pediatricians, as well as radiologists, neurologists, family practice doctors, and ER doctors. This gives students an opportunity to experience a wide variety of medical specialties. It also allows them to work with many different patients. As they gain knowledge about the different areas of medicine, most students make decisions about which field they like best.

### **Choosing a Specialty**

Students continue their rotations during their fourth year of medical school, but they begin to take on more responsibility. Also, this is when they decide on their specialty. By their fourth year, they have had a chance to explore many different areas of medicine. They have seen real-life doctors in

action, and they have worked alongside them. So the next step is to choose the medical field they want to pursue and graduate from medical school. Finally, they are officially doctors.

## **Doctors-in-Training**

By the time students graduate, they have completed eight years of formal schooling. However, their education is far from finished. Their next step is the residency, which is usually performed in a hospital under the direction of experienced physicians. A residency is an intense, hands-on medical training period that lasts for a minimum of three years. Some take much longer. For instance, residencies in anesthesiology and obstetrics take four years. An orthopedic surgery residency takes five years, and a plastic surgery residency takes six years. During this training period, residents are paid a salary for their work.

New doctors who are interested in a highly specialized field, such as neurosurgery, must perform residencies that last for six years or more. One example of this type of residency program is at Harborview Medical Center in Seattle. Dr. Richard Winn is the chief of neurosurgery, and he supervises the program. Each year, more than three hundred doctors apply—and only two are accepted. Plus, not only is the program hard to get into, it takes eight years to complete. A sign on Dr. Winn's office wall explains why his program is so difficult and why it takes such a long time. It reads, "If the training is tough, the war will be easy." Harborview's neurosurgical residency program has been called the best in the country.

Once doctors have completed their residencies, their formal medical training is finally complete. However, before they can practice medicine, they must get a license from the state in which they plan to work. When they are licensed, doctors may set up their own private practice or join a practice with other physicians. Or, they may go to work for hospitals, health departments, laboratories, or other medical organizations.

## **What Makes a Good Doctor**

Doctors work hard—very hard. Anyone who has put in the time and effort it takes to earn a medical degree is well aware of that. However, there are also other qualities that doctors need. First, they need to care about people. This applies to all doctors, even those who specialize in research or radiology. They may not work directly with patients, but their work still revolves around helping people. Doctors also need to be excellent thinkers. They must be able to examine a sick patient and figure out what is wrong. Then, they must be able to decide the best way to treat the patient's illness or injury.