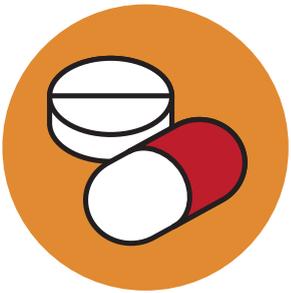


HEALTHCARE HEROES

THE MEDICAL CAREERS GUIDE



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Michele B. Kaufman, PharmD, BCGP

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Healthcare Heroes: The Medical Careers Guide

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Preface

We were interested in science at an early age and knew that science would play a big part in our careers. As pharmacists passionate about pharmacy and healthcare, friends and family often ask us for guidance on careers. Some of the comments or questions people have asked us are, “I’m interested in a career in healthcare, but I don’t know what I should do,” or “Can you tell me more about pharmacy and other professions?” Both parents and their children who were at a crossroads of choosing careers made such comments and asked these questions. Finding a satisfying career is an important stage in life and good guidance is the key to success. Finding the right career is an investment in yourself. We were lucky to find the careers that we enjoy and are right for us. We never think of our work as just a job... we are *always* passionate about challenging ourselves every day and motivating others to achieve their potential.

If you’ve picked up this book, you are most likely at a crossroads of choosing your career, or perhaps you are helping a friend or family member to delve deeper into researching a particular career. Your initial thought might be, “Why would pharmacists write a career book?” We took the “Oath of a Pharmacist” upon graduating from pharmacy school. The American Pharmacists Association developed this oath and other professional pharmacy associations and colleges of pharmacy have adopted this as a code of ethics. In this oath, in addition to optimizing patient care, the statement that stands out most to us is: “I will utilize my knowledge, skills, experiences and values to prepare the next

generation of pharmacists.” Throughout our careers, we have followed this oath and mentored numerous students in the medical field to conduct research, give presentations, publish articles and teach others, in order to optimize their career. In today’s marketplace, competitive advantage is invaluable, and it begins with knowledge. We have found it especially rewarding to see our students become successful practitioners and find fulfillment and personal success in their careers. We know that not everyone has a mentor readily available for guidance. We hope this book will help many individuals find their inspiration and trust that it will serve as a blueprint for finding a successful career.

We strive to bring real value to our readers and wanted to share the experiences of these healthcare professionals to inspire everyone to find the career that is right for them. When we speak about our careers — whether it’s one-to-one or on the auditorium stage — we personalize our experiences for our audience. Although we have taught and mentored numerous students interested in pursuing a healthcare career, we saw that our impact was still minimal. Many individuals still had unanswered career questions. Hence, came our idea for the book...how can we help young adults interested in understanding about healthcare learn about the many different careers? Why wait for the next career day to learn about the various professions when these individuals can read about the different professions in advance? Readers can also use this book as a resource to develop their questions, and bring them to the next career fair. Personalization is very important to us and our concept was to spotlight each healthcare professional, for our readers to experience the “personal touch.” We developed a way to personalize each healthcare provider career and considered that our readers would appreciate a new information format, as these healthcare experts describe their professions and provide in-depth information for readers. It was interesting for us to read the life experiences of how our contributors, experts in their field, became who they are today and we hope you, our readers, agree.

We knew we were on the right path when we received poignant feedback from our young adult peer reviewers, ages 11-18 years. Here are a few of the comments that truly resonated with us: *“A genuine lifesaver filled with chapters of professionals telling you everything you need to know about their job, it was written in a way that was fun to read,”* *“It gives the reader a real sense of the business.”* Another comment was: *“If you know you want to be a healthcare*

professional, whether it's in the emergency room or in the laboratory, then this book is right for you. If you don't know at all if you want to be a healthcare professional, then this book is STILL right for you."

Readers are encouraged to explore and learn about different careers beginning in elementary school. These days, it is the norm for schools to hold career days, where parents are welcomed into the school to speak to the different grades about their careers. We have even seen these career day events done as early as kindergarten! Even though there are over a hundred types of healthcare professions, and thousands of healthcare professionals, most people are not familiar with the diverse career opportunities and areas of practice available within the health field. Adults, much less young adults, often do not have exposure to a vast variety of healthcare professionals, except perhaps a physician, a dentist, a nurse, a pharmacist and maybe a dental hygienist. Through our market research, we discovered that our concept was unique and that there is a need for a resource that will equip readers with the knowledge necessary to guide their healthcare career path.

We hope that you find this book fun to read, and that it will be a useful resource and guide for readers of all ages, whether they are in middle school, high school, college or already out in the workforce. Our contributors are healthcare professionals who are ambitious, resourceful, innovative, adaptive — and renowned forces of change — from clinicians to technologists. They work in hospitals, offices, clinics, laboratories and in the field. They are recognized locally, regionally, and nationally for their accomplishments and expertise. Our goal was to have them share their extensive knowledge as part of their journey into each of their professions. We hope this insightful information can also help our adult readers who are interested in a career change to a healthcare profession.

This book is your career guide, showing you the requirements and core strategies to become a healthcare professional. From concept to writing, this book has been our passion project for the past several years. We hope you enjoy reading it as much as we have enjoyed writing it.

CHAPTER 1

Surgical Technologist

Mark Fusco, CST

Education:	High School diploma Surgical tech training program	<1-2 years
License:	Certified Surgical Technologist (CST) credential or the Tech in Surgery - Certified (TS-C) credential	
Median Income:	\$47,300 (range, \$32,870 - \$69,170)*	

**Differential shift (evenings, overnights), overtime and location will dictate salary.*

Why I Became a Surgical Technologist

There is an old saying “life is a journey, not a destination.” This is a difficult concept, especially when you are younger. You tend to view life in terms of age-oriented goals... when I am 25, I should have this... when I turn 40, I should have accomplished that. When these goals are not met – anger, frustration and sometimes depression occur. When you are older you realize age is just a number and life is a continual process of growth. When I was younger, I had no idea where I wanted my life to go. I bounced around from (what I felt at the time) were meaningless jobs. In my life I have been a clothing associate in a major department store, a mail clerk for a large Wall Street law firm, a timekeeper for an international shipping firm, a nurse’s aide, a banquet cook and a pastry chef. For a brief time, I even worked in a Veterinarian’s office handling exotic animals.

Now I am a surgical technologist. What a long and interesting trip it has been! Looking back at all the people I have met and the experiences I have had that helped shape me, I thank them all and I am extremely grateful to have known them.

This is a very important book. It fills a much-needed gap, exposing you to many opportunities in the medical field. You can also think of it as a life manual. Choosing a career can seem daunting, but remember, “You can change careers. Never feel like you are stuck.” If a job doesn’t feel right, move on and try something else, until it *does* feel right. When you are 50 years old with a family to support, it is much harder to switch gears. Now is the time to experiment. When you buy a t-shirt and a pair of jeans, you do not expect to wear them for the rest of your life. So why do people feel the need to stay in the same job their entire lives? I wish all of you well on your journey through life. Remember to laugh, love, and most of all explore as many different avenues as you can.

Overview

A drunk driver strikes a 19-year-old girl on her way home from college. An ambulance rushes her to the nearest emergency room. The doctors quickly realize she has massive internal injuries and is going into shock. They rush her into the operating room (OR). A flurry of activity begins. The anesthesiologist is desperately trying to put in intravenous (IV) lines, which serve to infuse medications, blood products and fluids. The trauma surgeon and his/her medical residents are deciding on their best course of action, nurses are getting medications and supplies and assisting in any way they can. Medical students are nervous and uncertain what to do... they just stand there. You, the surgical technologist, are alone in one part of the OR... your adrenaline is pumping, you are probably sweating, as you desperately struggle to set up your instruments to begin the surgery... you have about two minutes (it would normally take 20 minutes). The anesthesiologist yells out, “She’s crashing,” the surgeon asks if you are ready. You say yes—you have to be—any delay on your part would have a fatal result. The surgery lasts about three to four hours. Things went well. The bleeding has stopped, internal injuries are repaired, her vital signs (e.g., blood pressure, breathing rate, pulse) are stable. She will survive. You have helped

give this girl back to her family. The doctor turns to you, smiles, and says, “good job.” A sense of pride and accomplishment which you have never felt before swells within you. Welcome to the exciting world of Surgical Technology.

The Bureau of Labor Statistics predicts a 9% employment growth with 9,700 new jobs for Surgical Technologists between 2018-2028. Those individuals completing an accredited program will have the best job opportunities. The opportunities for the surgical technologist are as diverse as they are exciting. Do you want the rush of working at a major trauma hospital where victims of motor vehicle accidents or ruptured aneurysms come crashing through the door, or do you prefer a slower pace, working in a plastic surgeon’s surgical suite, where you will be involved in every step, from cleaning and sterilizing your own instruments to being the surgeons first assistant? Do you dream of living in exciting cities and exotic locales, or like to travel and experience practice in different areas of the country? Then you can become a traveling tech. As a traveling tech, you would fill in for techs on a leave of absence from their job. Perhaps you are a humanitarian at heart, then you could work with Doctors without Borders, traveling to impoverished countries performing surgeries ranging from cleft palates to broken bones. The possibilities are endless, but you may think, “Can I make a living doing this?” Yes, you certainly can. The national pay average for a surgical tech is \$23.58 per hour (about \$49,040 annually). Eighty percent of surgical techs earn between \$32,000 and \$64,800. However, this is just a guide. In extremely rural areas salaries tend to be toward the lower end of the pay scale, but in major cities and metropolitan areas they are significantly higher. It is not unusual for an OR tech (also called a scrub tech) in a large city with 10 years of experience to make almost double the national average. Salaries are contingent upon many factors such as the size of the hospital, demand for scrub techs, and/or whether the hospital is unionized or not. Also, in most hospitals there is the opportunity for overtime, and “taking call.” When you “take call,” you are at home, but available to come in at a moment’s notice for a possible emergency surgery. These are instances where you can greatly increase your base salary. I mentioned the idea of becoming a traveling tech. Hospitals that hire travelers usually need them desperately to fill in for their missing employees (e.g., someone out sick for surgery, maternity leave), and they pay well above base salary as well as a stipend for living expenses. If you are interested in the security of a government job, the United States (U.S.) Public Health Service or Veterans Administration (VA) hires surgical

techs. As a government employee, salaries are on a government pay scale with yearly increases, and you receive a decent pension when you retire.

Nationwide, surgeries are on the rise, especially with the aging population requiring health and surgical care. Your career will never become obsolete and cannot be outsourced.

Specialties and Subspecialties

The type of surgery dictates the specialties where a scrub tech would work, including: orthopedics, obstetrics and gynecology, cardiothoracic, trauma, adult versus pediatric, general, neurosurgery, oral and facial, plastic surgery, otolaryngology (ear, nose and throat), urology, vascular surgery, to name some of the more common types of surgeries. Other “specialties” include the setting of the procedure, which would be either ambulatory (without staying overnight in a hospital) or in-patient. Then, as mentioned, there are traveling techs, versus techs that work in one hospital, or group of hospitals within a health-system.

Requirements

Training programs range from less than a year to two years. If you attend a two-year program you could obtain an associate’s degree (at community colleges and vocational schools) or attend a nondegree program at a university. If you do not attend a two-year program you might graduate with a certificate. Some hospitals sponsor Surgical Tech programs to train employees who are working in less-skilled and lower-paying jobs. This is how I started as an OR Tech. Surgical tech program tuition costs vary. The Surgical Tech profession is formally regulated in a few states. Currently these states include Idaho, Indiana, Massachusetts, New Jersey, New York, South Carolina, Tennessee and Texas. To practice in these states, surgical techs must obtain nationally recognized certification and complete continuing education (CE) throughout their career. Many healthcare professions require certification and completion of continuing education throughout their career.

The surgical tech curriculum for certification includes both classroom (known as “didactic”) training and clinical (or experiential) training. Classroom subjects include anatomy, biology, learning medical terminology (medical words), physiology (how the body works) and pharmacology (how drugs work). In the U.S., recognized certifications are the Certified Surgical Technologist (CST) credential from The National Board of Surgical Technology and Surgical Assisting, and the Tech in Surgery – Certified (TS-C) credential from the National Center for Competency Testing.

The medical field as a whole offers excellent career opportunities, and surgical technology affords you to be on the front lines of it all. Some have compared surgeons to fighter pilots in the military. If this is the case, then the surgical technologist is the flight engineer, ensuring everything runs smoothly from take-off to landing. If you are looking for a career which is mentally challenging, emotionally rewarding and has more thrills than a roller-coaster ride, then think about surgical technology. It just might be right for you.

A Day in the Life of a Surgical Technologist

The Surgical Technologist is an integral part of the OR team which consists of the surgeon (and possibly medical residents), an anesthesiologist and a circulating nurse. The circulating nurse provides the interface between sterile and non-sterile areas within the OR. Circulating nurses work in every OR, in every hospital across the country. They assist in every surgical discipline including, but not limited to Orthopedics, Cardiothoracic, Neurosurgery, Vascular, Plastic Surgery, Obstetrics and Gynecology and General Surgery. The role of the scrub tech is varied and the scrub tech has many responsibilities. However, we can summarize the scrub tech’s main responsibilities into two very important functions: 1) setting up the OR prior to surgical procedures and 2) handling the instrumentation that the operating team uses during the surgery. The scrub tech must maintain the sterile field during the surgery (which minimizes post-operative infections). Every day is exciting and different. One day you may be working on a total knee replacement operation, which moves at an intense pace where instruments may number in the hundreds or thousands (and yes, you will learn them all). The next day

you may be assisting in an aneurysm clipping in the brain, where everything moves very slowly. Any misstep on the surgeons' part, or yours, could have a fatal result. These are the physical mechanics of the job. However, your most important function in the OR is to maintain a calm and confident environment at all times. The surgeons have an awesome responsibility. They have someone's life in their hands. The surgeons have a big responsibility and they have no one to turn to. It is all up to them. I can tell you from personal experience, having a trauma come crashing through the door, the surgeons may not show it, but they are nervous. If they see you and have confidence in you, they will relax and breathe easier. Having this confidence increases the possibility for a successful surgical result.

Career Outlook

The U.S. News and World Report ranks Surgical Technologists as #18 in the Best Health Care Support Jobs, and #100 in 100 Best jobs. Surgical Technologists have a relatively low 2.2% unemployment rate.

Search and Explore



Commission on Accreditation of Allied Health Education Programs

<https://www.caahep.org/Students/Program-Info/Surgical-Technology.aspx>

The National Board of Surgical Technology and Surgical Assisting

<http://nbstsa.org/>

Association of Surgical Technologists

<http://www.ast.org>

Cross Country TravCorps

<https://www.crosscountrytravcorps.com/jobs/p-surgical-tech-operating-room-tech>

American Traveler

<https://www.americantraveler.com/nursing-specialties/operating-room>

Similar Careers

Emergency Medical Technician

Certified Registered Nurse Anesthetist

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Patient Care Assistant

Surgeon

Your Blueprint to a Healthcare Career

"Healthcare Heroes: The Medical Careers Guide is an incredibly valuable resource for those contemplating a calling in the medical arena. The diversity of practitioners in 'white coats' who comprise the modern healthcare team is often bewildering to patients, families and those contemplating a career in the health disciplines. Drs. Choy and Kaufman admirably and concisely demystify this diverse group of trained professionals. They provide information about the nature and responsibilities of these health practitioners, as well as valuable insight into the personal attributes and strengths that lead to a successful and fulfilling healthcare career."

E. Paul Larrat, PhD; Dean, University of Rhode Island College of Pharmacy, Kingston, RI

"Dr. Choy and Dr. Kaufman have put together a down to earth and easy to read primer chockfull of academic and real-world information in order to help students and others make an 'informed and intelligent decision' on choosing a rewarding profession."

Jeffrey R. Gardere, PhD, D.Min, M.Phil, MS, ABPP, Board Certified Clinical Psychologist; Associate Professor, Touro College of Osteopathic Medicine, New York, NY

*"As a physician and a father of three, I often have students shadowing my practice and hospital rounds. Discussing the 'ins and outs' of the path of becoming a doctor or any healthcare related profession was always difficult to explain. Hard work and often times an early determination and understanding can make all the difference. The question is, how can students make such an important decision without adequate information or exposure? *Healthcare Heroes* describes the career path of many medical careers in an easy to understand and practical way - this is a great book! I highly recommend this book for all who are looking to pursue a healthcare career. I myself am excited that this book is available for my children."*

Vincent Y. Wang, DO; Private Practice Physician; Chief Executive Officer, The Association of Chinese American Physicians (ACAP), Flushing, NY



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