



WHAT CAN I DO WITH A PHARMACEUTICAL SCIENCES MAJOR?

Advanced Healthcare Professional Training Pathways

The Pharmaceutical Sciences major provides an outstanding foundation for a variety of healthcare professions: not just pharmacy and medicine.

This is not an all-inclusive list, but may help open your mind to the variety of career pathways available to Pharmaceutical Sciences students who are interested in working in clinical healthcare.

**Average salary data, obtained from glassdoor.com, is based on salaries of all individuals in a given profession and is not representative of an entry-level salary. Salary is commensurate with experience and education, and may vary by location.*

Anesthesiology Assistance

Anesthesiologist assistants are highly skilled professionals who work under the direction of licensed anesthesiologists (specialist physicians) and as part of anesthesia care team to design and implement anesthesia care plans. They accompany the patient before, during and after anesthesia to ensure quality and continuity of care.

Required Training 2-Year Anesthesiology Assistant Master's Degree

Average Salary \$155,225*

Learn More At <https://explorehealthcareers.org/career/allied-health-professions/anesthesiologist-assistant/>

Cytotechnology

Cytotechnologists are laboratory professionals who study cells and cellular anomalies. Using a microscope, they examine slides of human cells for any indication that a cell is abnormal and/or diseased (i.e., cancerous or precancerous lesions, infectious agents or inflammatory processes). Cytotechnologists often play a crucial role in helping patients to recover from illness by identifying a disease while it is still at a treatable stage.

Required Training 1-Year Post-Baccalaureate Certificate in Cytotechnology

Average Salary \$ 81,411*

Learn More At <https://explorehealthcareers.org/career/allied-health-professions/cytotechnologist/>

Dentistry

Dentistry is the branch of the healing arts and sciences devoted to maintaining oral health. A degree in dentistry offers a number of career options, including: Academic dentistry; Private practice either as a general dentist or specialist (self-employed, employee, associate/ partner); Dental research; Dental public policy; International health care; and Federal government (military dentist).

Required Training 4-year DDS or DMD degree

Average Salary \$186,433*

Learn More At <https://explorehealthcareers.org/career/dentistry/dentist/>

Dosimetry	
The medical dosimetrist is a part of the radiation oncology team, which includes a radiation oncologist, medical physicist, radiation therapists and oncology nurses. Medical dosimetrists ensure that radiation treatment promotes the most lethal radiation dose with the fewest side effects to the patient's healthy organs.	
Required Training	2-Year Master's Degree in Medical Dosimetry OR 1-Year Post-Baccalaureate Certificate Program
Average Salary	\$133,453*
Learn More At	https://explorehealthcareers.org/career/allied-health-professions/medical-dosimetrist/
Epidemiologist	
Epidemiology is the study and control of disease or injury patterns in human populations. When food poisoning or an influenza outbreak attacks a community, epidemiologist or "disease detectives", are asked to investigate the cause of disease and control its spread. Epidemiologists work at all stages of the outbreak with other public health practitioners to identify and stop the outbreak.	
Required Training	2-Year Master's of Public Health (MPH) in Epidemiology
Average Salary	\$76,843*
Learn More At	https://explorehealthcareers.org/career/public-health/epidemiology/
Genetic Counseling	
Genetic counselors provide a critical service to individuals and families considering undergoing genetic testing by helping them identify their risks for certain disorders, investigate family health history, interpret information and determine if testing is needed. The genetic counseling process helps people understand and adapt to the medical, psychological and familial implications of genetic contributions to disease. Most genetic counselors see patients in a clinic or hospital setting, and often work with obstetricians, oncologists and other doctors	
Required Training	2-Year Master's Degree in Genetic Counseling
Average Salary	\$76,465*
Learn More At	https://explorehealthcareers.org/career/allied-health-professions/genetic-counselor/
Immunogenematology /Blood Bank Technology	
Specialists in blood bank technology perform both routine and specialized tests in blood donor centers, transfusion services, reference laboratories and research facilities. Although medical technologists and medical laboratory technicians also perform various blood tests, the blood bank technology specialist's training enables him or her to perform specialized tests, such as those dealing with the study of blood and its immunities (immunohematology).	
Required Training	2-Year Master's Degree in Blood Bank Technology OR 1-Year Post-Baccalaureate Certificate Program
Average Salary	\$83,143*
Learn More At	https://explorehealthcareers.org/career/allied-health-professions/blood-bank-technology-specialist/
Medical Laboratory Science	
Medical laboratory science professionals (also called clinical laboratory scientists or clinical laboratory technicians) are highly skilled scientists who discover the presence or absence of disease and provide data that help physicians determine the best treatment for the patient. Although they are not often personally involved with patients, medical laboratory scientists and technicians play a crucial role in the process of providing personalized care. They generate vitally important data for identifying and treating cancer, heart disease, diabetes and many other health conditions.	
Required Training	MLS (Medical Laboratory Scientist) Certification. To qualify for certification, applicants must have a BS in science, plus either completion of an accredited post-baccalaureate medical laboratory science training program OR one year of approved clinical laboratory experience.
Average Salary	\$64,943*
Learn More At	https://explorehealthcareers.org/career/allied-health-professions/clinical-laboratory-scientist-technician/

Medicine (Allopathic or Osteopathic)

An osteopathic (DO) and Allopathic (MD) physicians are fully licensed to practice in every state and in more than 65 countries worldwide. As licensed physicians, they diagnose, treat, prescribe medications and perform surgery. An MD is a traditional medicine degree, whereas a DO takes a holistic, mind-body-spirit approach to care. In the U.S., the same licensing boards give licenses to both types of doctor, and they must meet the same standards for practicing medicine.

Required Training 4-Year MD or DO Degree, followed by residency

Average Salary \$194,644* (salary can vary widely by specialty)

Learn More At <https://explorehealthcareers.org/field/medicine/>

Nursing

When providing direct patient care, nurses observe, assess and record symptoms, reactions and progress, which provides the basis for care planning and intervention. RNs also develop and manage nursing care plans, instruct patients and their families in proper care and help individuals and groups take steps to improve or maintain their health. Registered nursing requires a large base of knowledge in order to assess, plan and intervene to promote health, prevent disease and help patients cope with illness. While state laws govern the scope of nursing practice, it is usually patient needs that determine a nurse's daily job activities.

Required Training 15-Month Post-Baccalaureate Master of Science in Nursing (offered at UA)

Average Salary \$67,715*

Learn More At <https://explorehealthcareers.org/career/nursing/registered-nurse/>

Occupational Therapy

Occupational therapists help people of all ages to fully engage in their daily lives, from their work and recreation to activities of daily living like getting dressed, cooking, eating and driving. Occupational therapy services may include comprehensive evaluations of the client's home and other environments (e.g., workplace, school), recommendations for adaptive equipment and training in its use, and guidance and education for family members and caregivers. Occupational therapy practitioners have a holistic perspective, in which the focus is on adapting the environment to fit the person, and the person is an integral part of the therapy team.

Required Training 2-Year Master's in Occupational Therapy (MOT) Degree

Average Salary \$79,958*

Learn More At <https://explorehealthcareers.org/career/occupational-therapy/occupational-therapist/>

Optometry

Doctors of Optometry (ODs) are the independent primary health care professionals for the eye. Optometrists examine, diagnose, treat, and manage diseases, injuries, and disorders of the visual system, the eye, and associated structures as well as identify related systemic conditions affecting the eye (American Optometric Association [AOA]).

Required Training 4-Year Doctor of Optometry (OD) Degree

Average Salary \$140,441*

Learn More At <https://explorehealthcareers.org/career/optometry/optometrist/>

Orthotics & Prosthetics

People lose limbs or suffer orthopedic impairment for many reasons, including accidents, combat injuries, birth defects and disease. Health care workers who specialize in orthotics and prosthetics (O&P) help these patients regain their mobility by fitting them with artificial limbs (prostheses) and orthopedic braces (orthoses). At the highest level, O&P practitioners perform a detailed assessment to determine the patient's O&P needs and assess the patient's functional status, including muscle development, gait, sensory function, range of motion, joint stability and skin integrity.

Required Training 2-Year Master's Degree in Orthotics & Prosthetics

Average Salary \$74,621*

Learn More At <https://explorehealthcareers.org/career/orthotics-prosthetics/orthotist-and-prosthetist/>

Pathologist Assistance	
A pathologists' assistant is an intensively trained allied health professional who provides anatomic pathology services under the direction and supervision of a licensed, board-certified or board-eligible pathologist. A pathologists' assistant is qualified to perform all of the surgical and autopsy functions of a pathologist leading up to, but not including, the diagnosis.	
Required Training	2-Year Pathologist's Assistant Master's Degree
Average Salary	\$64,700*
Learn More At	https://explorehealthcareers.org/career/allied-health-professions/pathologists-assistant/
Perfusion/Cardiovascular Science	
Due to the nature of the cardiac surgery, the surgeon needs to work on a still heart, and it is necessary to temporarily replace the patient's circulatory and respiratory function. It is the responsibility of the perfusionist, a specialized healthcare professional, to assume the function of the heart and/or lungs during these medical procedures. A perfusionist operates a heart-lung machine, which propels oxygenated blood to the patient's tissues while the surgeon operates on the heart. The perfusionist manages the physiological and metabolic demands of the patient while the cardiac surgeon operates on the heart. It is also the perfusionist's responsibility to deliver the drug that stops the heart.	
Required Training	2-Year Master's Degree in Perfusion
Average Salary	\$133,369*
Learn More At	https://explorehealthcareers.org/career/allied-health-professions/perfusionist/
Pharmacy	
Pharmacists are medication experts and play a critical role in helping people get the best results from their medications. Pharmacists prepare and dispense prescriptions, ensure medicines and doses are correct, prevent harmful drug interactions, and counsel patients on the safe and appropriate use of their medications. They have specialized expertise about the composition of medicines, including their chemical, biological, and physical properties, as well as their manufacture and use. Other health care professionals rely on pharmacists to select and administer medications that offer the best results and quality of life for a particular patient. Pharmacists may also prepare personalized medications, participate in patient rounds at a hospital, reduce the spread of infections, conduct research or clinical trials, or focus on a specific patient population or disease state (e.g., diabetes, heart disease, asthma, HIV, and pain management).	
Required Training	4-Year Doctor of Pharmacy (PharmD) Degree (offered at UA)
Average Salary	\$123,808*
Learn More At	https://explorehealthcareers.org/career/pharmacy/pharmacist/
Physical Therapy	
Physical therapists are evidence-based, health care professionals who diagnose and treat individuals of all ages who have medical problems or other health-related conditions that limit their abilities to move and perform functional activities in their daily lives. They offer cost-effective treatment that improves mobility and relieves pain, reduces the need for surgery and prescription drugs, and allows patients to participate in a recovery plan designed for their specific needs. In addition, physical therapists work with individuals to prevent the loss of mobility before it occurs by developing fitness and wellness programs for healthier and more active lifestyles.	
Required Training	3-Year Doctor of Physical Therapy (DPT) Degree
Average Salary	\$82,258*
Learn More At	https://explorehealthcareers.org/career/physical-therapy/physical-therapist/

Physician Assistance	
Physician assistants are medical providers who are licensed to diagnose and treat illness and disease and to prescribe medication for patients. They work in physician offices, hospitals and clinics in collaboration with a licensed physician. In a primary care setting, physician assistants can provide nearly all of the clinical services a physician does, including: Take medical histories; Perform physical exams; Order and interpret laboratory tests; Diagnose and treat illnesses; Counsel patients; Assist in surgery; Set fractures	
Required Training	2-Year Master of Science in Physician Assistant Studies
Average Salary	\$140,011*
Learn More At	https://explorehealthcareers.org/career/medicine/physician-assistant/
Podiatry	
Podiatric medicine is a branch of the medical sciences devoted to the prevention, diagnosis and treatment of foot disorders resulting from injury or disease. A doctor of podiatric medicine is to the foot what a dentist is to the mouth or an ophthalmologist to the eye—a specialist who has undergone lengthy, thorough study to become qualified to treat a specific part of the body.	
Required Training	4-Year Doctor of Podiatric Medicine (DPM)
Average Salary	\$192,593*
Learn More At	https://explorehealthcareers.org/career/podiatric-medicine/podiatrist/
Psychiatry	
Psychiatrists are physicians who specialize in the diagnosis and treatment of mental illnesses. While many people associate psychiatry with psychoanalysis, most psychiatrists today provide a wide range of biological, psychotherapeutic and psychosocial treatments tailored to the specific needs of the patient. Psychiatrists also serve as the medical experts for the mind/brain/body interface.	
Required Training	4-Year Medical Degree (MD or DO) plus residency program in Psychiatry
Average Salary	\$251,000*
Learn More At	https://explorehealthcareers.org/career/mental-health/psychiatrist/
Veterinary Medicine	
Veterinarians play a major role in the health of our society by caring for animals and by using their expertise and education to protect and improve human health as well. There is a growing need for veterinarians with post-graduate education in particular specialties, such as molecular biology, laboratory animal medicine, toxicology, immunology, diagnostic pathology or environmental medicine. The veterinary profession is also involved in aquaculture, comparative medical research, food production and international disease control.	
Required Training	3 to 4-Year Doctor of Veterinary Medicine (DVM) Degree (Offered at UA)
Average Salary	\$146,457*
Learn More At	https://explorehealthcareers.org/career/veterinary-medicine/veterinarian/

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