

Get Your CaREER in Gear: Health Care Majors and Careers You've Never Heard About!

Texas State University Round Rock STEM-for All Speaker Series



TEXAS  STATE
UNIVERSITY[®]

The rising STAR of Texas

MEMBER THE TEXAS STATE UNIVERSITY SYSTEM

Abstract

- Over the course of my 30+ year career in public health, health care and academia, I continue to cross paths with individuals who have never heard about multiple career paths in health care.
- While most people understand or know about college majors and careers as a physician, nurse, veterinarian, pharmacist, physical therapist or other positions that are public facing, often they are missing or not understanding other areas of health care that provide the foundation of medical services and life saving contributions to everyone
- Today, I hope to share with you several of these critical areas of health care and public health that far too often go hidden to our students and citizens.

The College of Health Professions Offers...

- Professional, technical, clinical and academic programs in health care
- Nationally recognized programs with a strong emphasis on clinical practice, teaching and research
- On-campus practice facilities in Round Rock with Texas State Sleep Center, Physical Therapy Clinic, Speech-Language-Hearing Clinic
- San Marcos Speech-Language-Hearing Clinic
- On-campus state of the art clinical practice laboratories
- Outstanding Advising Center with six professional advisors



About the College of Health Professions

- Over 120 full-time faculty
- Nearly 3,000 undergraduate students, another 450 post-baccalaureate and graduate students
- 4 departments, 2 programs and 2 schools:
- Round Rock Campus
 - Communication Disorders Department
 - Health Information Management Department
 - Physical Therapy Department
 - Radiation Therapy Program
 - Respiratory Care Department
 - St. David's School of Nursing
- San Marcos Campus
 - Clinical Laboratory Science Program
 - School of Health Administration

About the CHP Programs

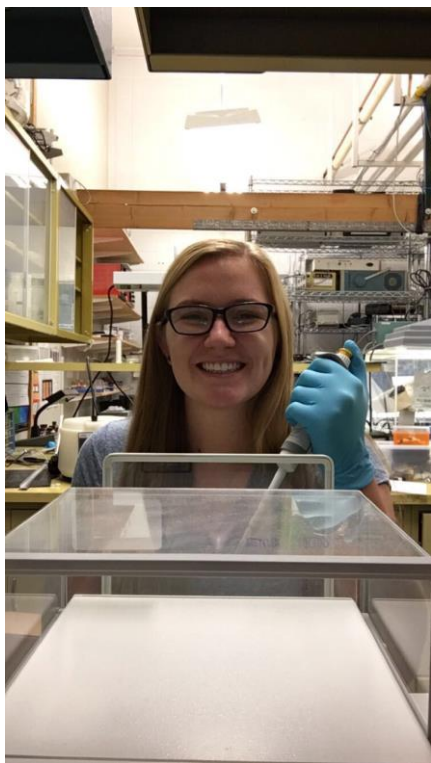
- Most undergraduate programs are 2 + 2 programs
 - Enroll as a BS in Health Sciences major and complete core and specific pre-requisite courses prior to admission to program
- Enrollment limited for most majors
- Most have selective and limited admissions
- Most programs require criminal background checks
- Most are accredited and meet national standards
- Admission profiles can be found at <https://www.health.txstate.edu/advising/Programs/admission-profiles.html>

Clinical Laboratory Science Program

- BSCLS in Clinical Laboratory Science [also known as Medical Laboratory Science]
- Accredited by the National Accrediting Agency for Clinical Laboratory Sciences
- Graduates eligible to take the Medical Laboratory Scientist national certification examination of the American Society for Clinical Pathology, MLS (ASCP)
- Admission to the Junior Year – selective admissions. Fall only. 20/year.
- Emphasis on biology and chemistry courses as prerequisites
- State-of-the-art molecular diagnostics laboratory
- Graduates work in clinical laboratories in hospitals, clinics, research institutes

Clinical Laboratory Science was one of the first health professions programs at Texas State.

Clinical Laboratory Science Admission Profile



Class Entering in Fall of :	2017	2018	2019	2020	2021
Completed Applications	45	38	37	32	41
Applicants Accepted	21	19	21	21	20
Average Prerequisite GPA*	3.37	3.48	3.52	3.18	3.41
Average Science GPA*	3.16	3.31	3.26	2.91	3.26

*Average GPAs for admitted students

www.health.txstate.edu/cls

Clinical Laboratory Science Admission Profile

- Medical laboratory professionals conduct about 13 BILLION laboratory tests each year.
- The results from these tests provide about two-thirds of the critical life saving data to physicians and other health care professionals from cradle to grave.
- Laboratory testing is the single highest-volume medical activity affecting Americans which forms the backbone of the public health and health care system.

www.health.txstate.edu/cls

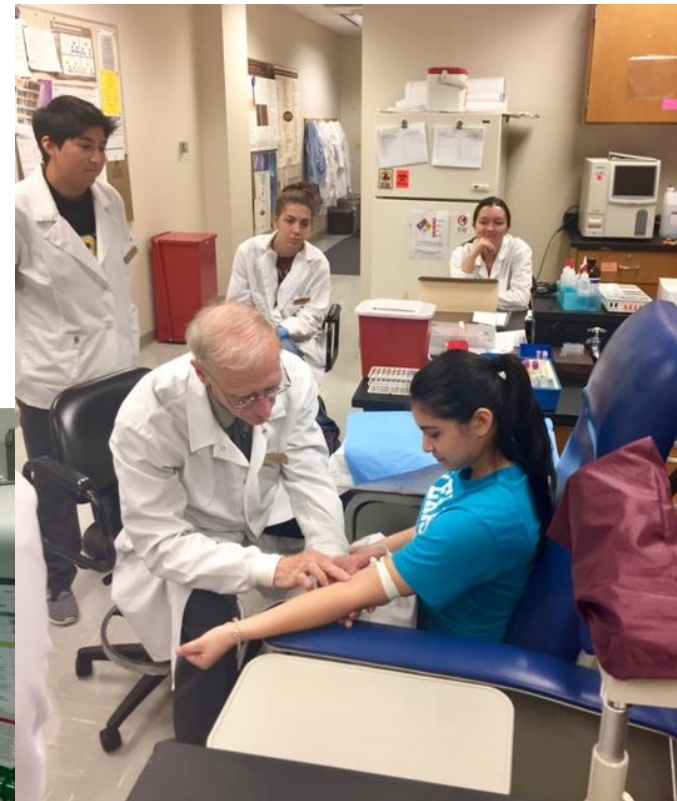
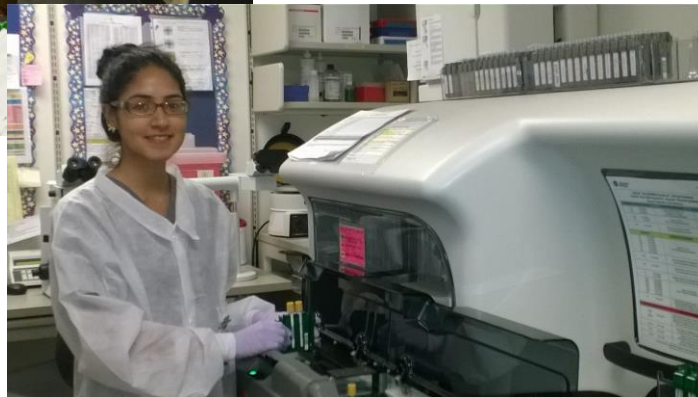
Clinical Laboratory Science Admission Profile

- Hematology, Clinical Microbiology, Immunohematology [blood bank], Clinical Chemistry, Molecular Diagnostics, Immunology, and QC / QA.



Clinical Laboratory Science Admission Profile

- Hematology, Clinical Microbiology, Immunohematology [blood bank], Clinical Chemistry, Molecular Diagnostics, Immunology, and QC / QA.



Radiation Therapy Program

- BSRT in Radiation Therapy
- Accredited by the Joint Review Committee on Education in Radiologic Technology
- 2 ½ year program that begins with junior year – selective admissions. Fall only. 16/year.
- Graduates eligible to take the ARRT national registry examination
- Graduates work as certified radiation therapists in private facilities and ambulatory care centers.

Radiation Therapy Admission Profile



Class Entering in Fall of :	2017	2018	2019	2020	2021
Completed Applications	32	31	36	29	27
Applicants Accepted	15	16	16	17	18
Average Overall GPA*	3.55	3.61	3.41	3.67	3.56

*Average GPA for admitted students

Department of Communication Disorders

- **BSCD in Communication Disorders**
 - Provides undergraduate students with the academic background to successfully enter a graduate program in speech-language pathology or audiology.
 - Provides knowledge in normal and disordered speech, language, swallowing and hearing processes.
 - Selective admissions process. Fall only. 60/year.
- **MSCD or MA in Communication Disorders**
 - The graduate program in Communication Disorders is a full-time, face-to-face program with a highly competitive admissions process.
 - Prepares clinicians for employment in hospitals, clinics, private practice, and public schools.
 - Meets education and clinical requirements for state licensure as a speech-language pathologist and for the Certificate of Clinical Competence in Speech-Language Pathology awarded by the American Speech-Language-Hearing Association (ASHA)
 - Fall only admissions. 40/year.



Graduate program offers cognates in autism; fluency; versatility in practice; neurogenetics, voice, and swallowing; and bilingual speech-language pathology.

Communication Disorders Admission Profile



Class Entering in Fall of :	2018	2019	2020	2021
Completed Applications	53	59	56	56
Applicants Accepted	43	46	46	47
Average Overall GPA*	3.6	3.51	3.58	3.5
Average Prerequisite GPA *	3.8	3.6	3.7	3.7

*Average GPAs for admitted students

www.health.txstate.edu/cdis

Department of Health Information Management

- BSHIM in Health Information Management
 - Accredited by the Commission on Accreditation for Health Informatics and Information Management Education
 - Graduates eligible to sit for RHIA examination
 - Professional practice experience assignments available in a multitude of settings and kinds of facilities
 - Fall admit only. In residence cohort 25/year. Fully online cohort 25/year.
- MHIM is the only HIM master's program in Texas
 - Accredited by the Commission on Accreditation for Health Informatics and Information Management Education. Fully online.
 - Fall admissions only. 25/year.

The BSHIM is one of only three HIM baccalaureate degree programs in Texas.

Health Information Management Admission Profile



Class Entering in Fall of :	2017	2018	2019	2020	2021
Completed Applications	69	53	52	53	64
Applicants Accepted	53	40	48	38	39
Average Overall GPA*	2.94	3.1	2.98	2.94	3.1

*Average GPA for admitted students

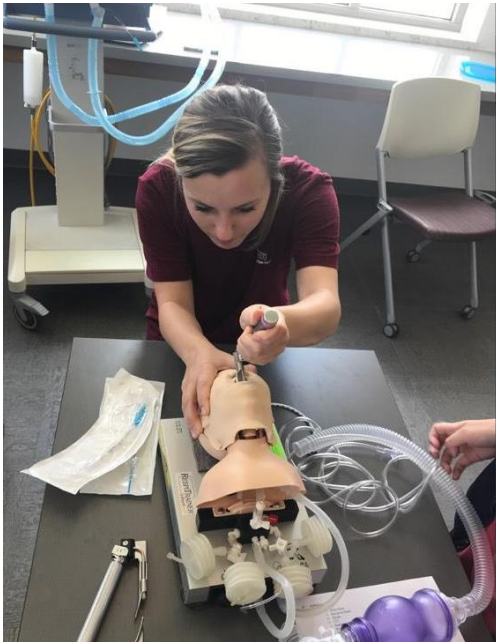
www.health.txstate.edu/him

Department of Respiratory Care

- **BSRC**
 - Clinical training begins immediately, providing 2 years of patient care
 - Internship specializations in over 20 specialties
 - Fall only admissions. 44/year.
- **RRT-to-BSRC Completion**
 - Fully online. RRT required from an associate degree program
 - Admit fall/spring/summer. 80/semester.
- **MSRC**
 - 36 hour online graduate program for practicing respiratory therapists
 - Can be completed in four semesters
 - Option for Leadership or Polysomnography concentrations
 - Fall/Spring/Summer admissions. 20/semester.
- **Nationally accredited by CoARC**

Texas State's Respiratory Care Program is the largest university-based RC program in the country and one of only 45 BSRC programs in the nation.

Respiratory Care Admission Profile



Class Entering in Fall of :	2017	2018	2019	2020	2021
Completed Applications	93	88	75	73	69
Applicants Accepted	44	44	44	44	44
Average Overall GPA*	3.08	3.11	3.29	3.12	3.04

*Average GPA for admitted students

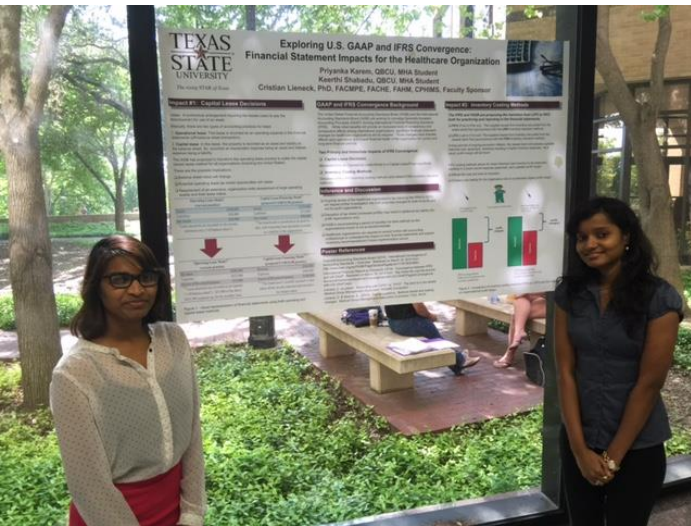
www.health.txstate.edu/rc

School of Health Administration

- **BHA in Healthcare Administration**
 - Certified by the Association of University Programs in Health Administration.
 - Enroll in HA courses in junior year upon meeting criteria.
- **BS in Health Sciences**
 - Implemented in Fall 2019.
 - Start as BSHS and change major if accepted to competitive program.
- **MHA in Healthcare Administration**
 - Accredited by the Commission on Accreditation of Healthcare Management Education. Fully online
 - Executive track option
- **Long-Term Care Graduate Certificate**
 - Admit Fall, Spring & Summer. 20/semester.

Texas State has the largest School of HA in Texas.

Healthcare Administration Admission Profile



Total Admitted in Academic Year :	AY 2018	AY 2019	AY 2020	AY 2021	AY 2022*
Completed Applications	93	94	77	86	35
Applicants Accepted	74	83	68	65	31
Average TXST GPA**	3.17	3.18	3.24	3.12	3.22

*AY 2022 includes application data for students admitted in Fall 2021

**Average GPA for admitted students

www.health.txstate.edu/ha

Health services coordination

- Perhaps you've already earned a certificate, diploma, or associate's degree in a healthcare-related field and you're exploring opportunities for advancement.
- Bachelor of Science Health Services Coordination can be tailored to your ongoing education and is typically an online degree
- Courses in: Healthcare management, care coordination, health sciences, strategy, leadership, professional practice experience, and a capstone.

The number of positions for health educators and community health workers is expected to grow 13% from 2019 to 2029.

Health services coordination

Possible jobs:

- Care coordinator
- Patient advocate
- Health services coordinator
- Patient educator
- Community health educator

Possible work settings:

Acute care hospital
Extended stay facilities
Ambulatory care
Home care
Wellness and outreach

The role of the health services coordinator (HSC) is to help patients and families navigate the complex healthcare environment.

Cardiac Perfusionist: Assist in Heart Surgery

- Few people outside the medical world have ever heard of cardiac perfusionists, but these talented allied health professionals are at the front line of open-heart surgery.
- Cardiac perfusionists, also known as certified clinical perfusionists or CCPs, operate the "heart-lung" machine which takes the place of the heart during these life-changing operations. The machine performs all the functions of a human heart: circulating, oxygenating, and purifying the blood.
- Cardiac perfusionists play a critical role in many surgeries involving the heart including organ transplants, heart bypasses, and other cardiac operations.

Cardiac Perfusionist: Assist in Heart Surgery

- These healthcare workers typically complete a bachelor's degree, generally in biology or a related science, before undertaking an accredited training program in clinical cardiac perfusion to gain the skills necessary to handle this important work.
- These programs typically require students to complete at least 150 procedures as a trainee before passing a certification exam offered by the American Board of Cardiovascular Perfusion. Only upon completing these requirements is an individual permitted to work as a cardiac perfusionist.
- In the U.S., there are currently approximately 18 schools that offer perfusionist programs. Perfusionist training is offered at the certificate, bachelor's and masters degree levels.

Cardiac Perfusionist: Assist in Heart Surgery



Entry-level cardiac perfusionists stand to make between \$60,000 and \$75,000 a year. With some experience behind them, perfusionists are compensated for their specialist skills to the tune of between \$70,000 and \$90,000. [American Medical Association]

Perfusion managers stand to earn more than \$100,000 for their roles.

Medical Librarian

- Medical librarians might never pick up a syringe or scalpel, but they're key members of the healthcare community.
- They help physicians, allied health professionals, and medical researchers stay up to date with new developments in specialty medical areas and liaise with patients and other members of the public looking for health information they can trust.
- Medical librarians work in a range of environments where current medical information is required, such as colleges and universities, hospitals, consumer health libraries, research centers, foundations, insurance companies, pharmaceutical firms, and government agencies.

Medical Librarian



The salary of a medical librarian depends on the type and location of their institution, their level of responsibility, their length of employment, and their technical skills.

According to the Medical Library Association, junior medical librarians typically make \$49,060. This annual salary increases to an average of \$66,622 with experience. Library director positions are much more lucrative with average salaries ranging from \$52,293 to \$116,200.



Echocardiographer

- More commonly known as a cardiac sonographer or cardiac ultrasound technologist, an echocardiographer operates specialized equipment that uses sound waves to create and transmit images of the heart that will then be used to diagnose medical conditions.
- Echocardiographers vary in their educational backgrounds – some finish a two-year Associate’s degree program, while others complete one of a few Bachelor’s degree programs in echocardiography available in the U.S.
- Other echocardiographers also receive on-the-job training in hospitals and clinics, but they generally tend to be professionals already working in a related field.

Echocardiographer.



Echocardiographer.

- Average salaries vary depending on experience, education and region, but the median salary is just under \$62,000.

\$32.37 / hour ▾

Avg. Base Hourly Rate (USD)



The average hourly pay for an Echocardiographer is \$32.37

Hourly Rate ⓘ

\$25 - \$43

Bonus

\$200 - \$2k

Profit Sharing

\$0 - \$1k

Total Pay ⓘ

\$53k - \$90k

Based on 500 salary profiles (last updated Feb 05 2022)

https://www.payscale.com/research/US/Job=Echocardiographer/Hourly_Rate

Cytotechnologist

- Cytotechnologists play an indispensable role in hospital and clinical settings as well as commercial laboratories.
- As laboratory professionals with specialized education and knowledge in cellular biology, they review cell specimens obtained from patients for indications of disease and illness.
- Lab professionals who evaluate patients' cell samples and are trained to notice subtle changes to accurately detect precancerous, malignant, and infectious conditions. Cytotechnologists *usually work closely with a pathologist.*

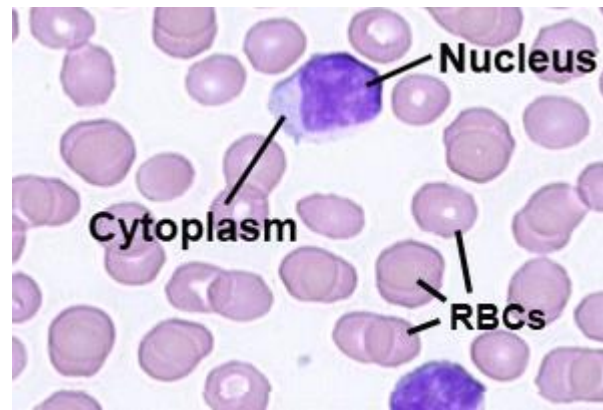


Cytotechnologist.

- As a cytotechnologist, you are responsible for closely studying cells for cellular changes and anomalies with the purpose of early detection of medical issues like infection or diseases. Information provided by cytotechnologists helps pathologists to diagnose and treat ailments.

Cytotechnologist.

- To enter the profession, budding cytotechnologists must complete a Bachelor's degree in a related field (e.g., Biology, Chemistry), although some combination of education and on-the-job training may be available for those already in a related healthcare profession. Many employers prefer to hire cytotechnologists who are certified by a recognized professional association.
- The average salary exceeds \$50,000, with some cytotechnologists earning more than \$60,000.



14% Job Growth Rate

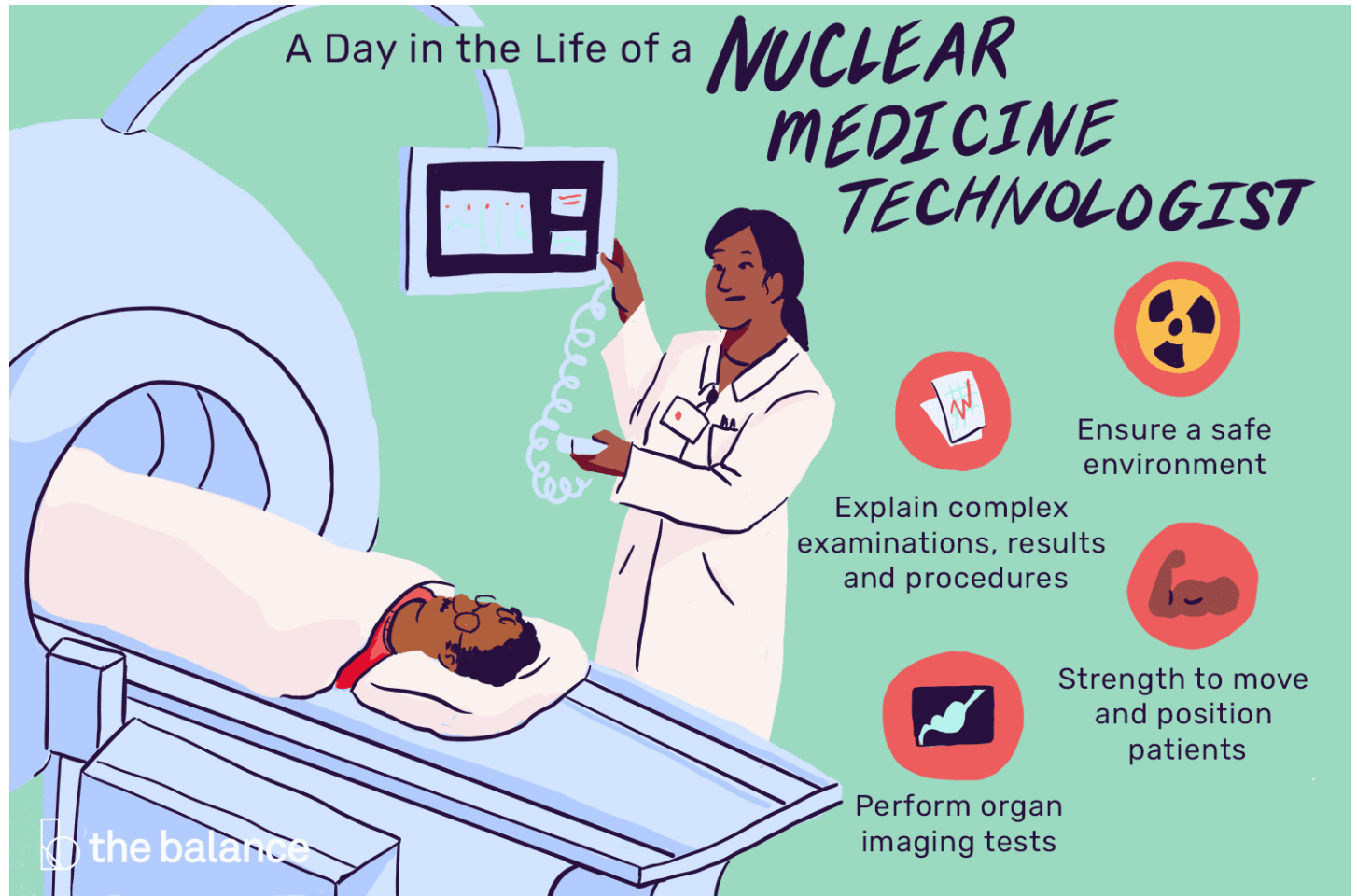
Nuclear Medicine Technologist

- Common responsibilities of nuclear medicine technologists include preparing and administering radiopharmaceuticals, testing for and treating diseases through radiation, conducting and processing studies, and recording the results. They also ensure safety protocols are followed, monitor patients for reactions, and use imaging equipment.
- Nuclear medicine technologists mostly work in hospitals, but some can also be found in imaging clinics, diagnostic labs, and doctors' offices.

Nuclear Medicine Technologist

- The majority of these professionals possess an associate degree, though bachelor's level programs do exist. Some states require nuclear medicine technologists to possess licensure. Though not required, many individuals become certified.
- Sample of reported job titles: Certified Nuclear Medicine Technologist (CNMT), Nuclear Cardiology Technologist, Nuclear Medicine PET-CT Technologist (Nuclear Medicine Positron Emission Tomography - Computed Tomography Technologist), Nuclear Medicine Technologist (NMT), Radiation Safety Officer, Registered Nuclear Medicine Technologist, Staff Nuclear Medicine Technologist

Nuclear Medicine Technologist



Nuclear Medicine professionals earn a median salary of \$76,820

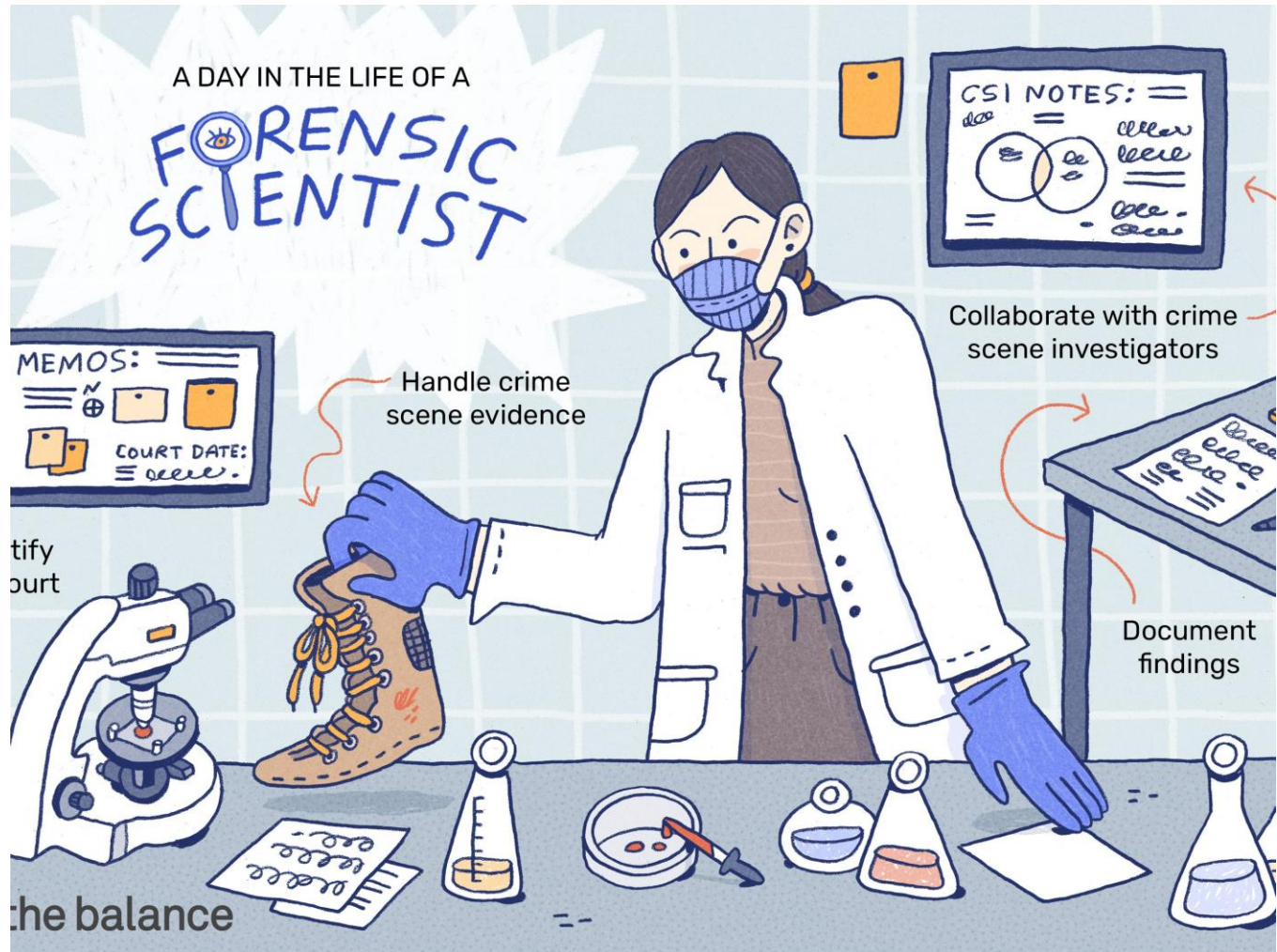
Medical Examiner Technician

- Also known as autopsy technicians, these individuals support medical examiners and coroners when performing autopsies on bodies. Common responsibilities include assisting with toxicology and pathology examinations and reports, performing examinations, understanding the cause of death, and filling out death certificate paperwork.
- These individuals often work for the local, state, or federal government, law firms, or forensics laboratory.

Medical Examiner Technician

- The majority of roles require a bachelor's degree in biology, forensics, or a related topic. Some entry-level roles may allow for an associate degree alongside on-the-job training. *Many states set licensing requirements for these professionals, so check with your local board to learn more.*
- Employment of forensic science technicians is projected to grow 16 percent from 2020 to 2030, much faster than the average for all occupations.

Medical Examiner Technician



The median annual wage for forensic science technicians was \$60,590 in May 2020.

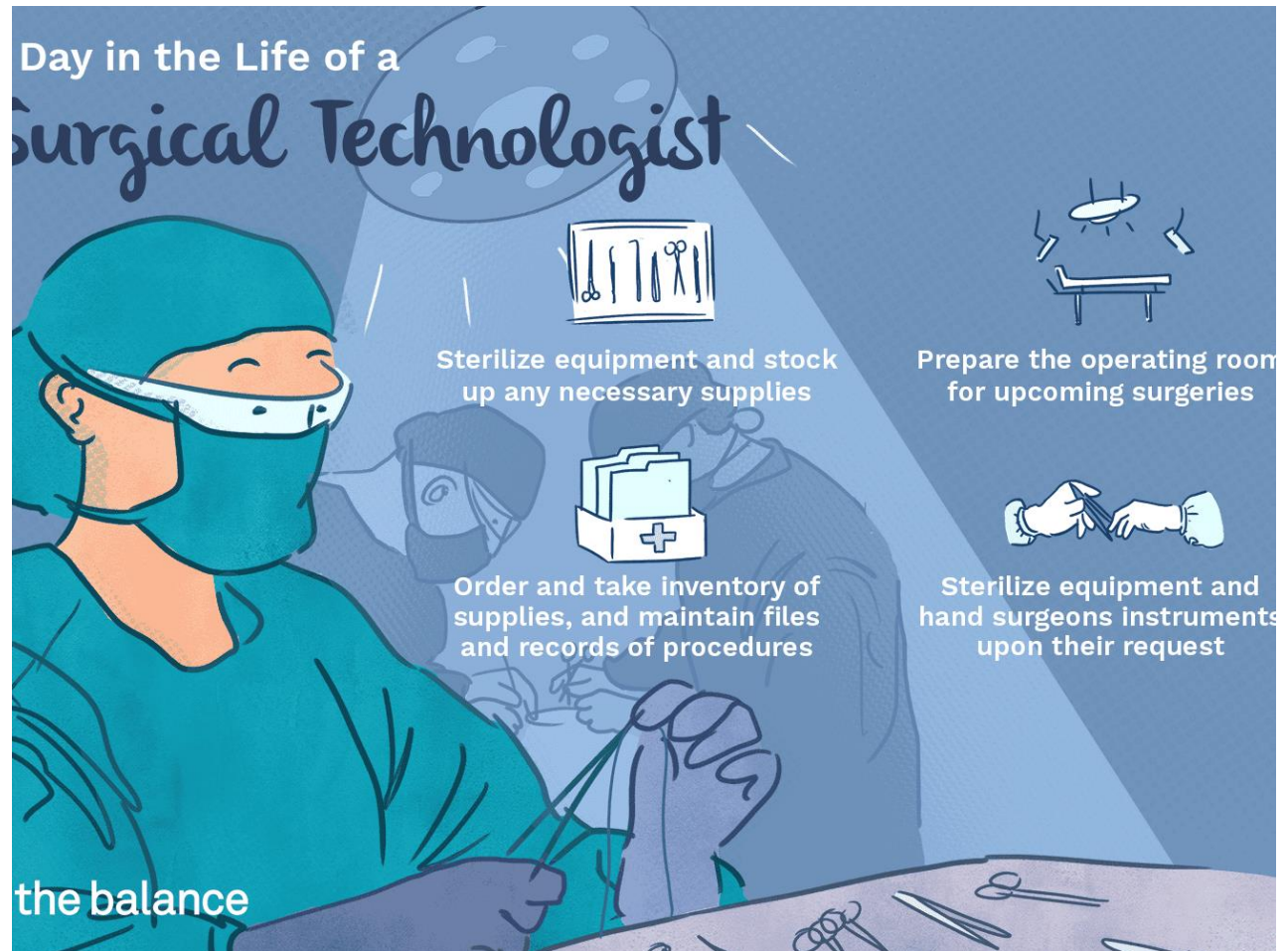
Organ and Tissue Procurement Technician

- Also known as tissue recovery technicians, these medical professionals work to harvest organs and tissues in patients who died as organ donors. They possess special training in aseptic recovery, proper collection techniques, and ways of transporting the harvested materials so they can be used in another in-need patient.
- They typically work in hospitals and other types of clinics.

Organ and Tissue Procurement Technician

- The majority of organ and tissue procurement technicians possess a diploma, certificate, or an associate degree. Some states set regulations around tissue recovery technicians, making it important for learners to check with their state board. Some students also seek out certification to stand out in the job market.
- Learn more: National Board for Surgical Technology and Surgical Assisting. The NBSTSA provides credentialing and certification and champions the work of these professionals.

Medical Examiner Technician



The median annual wage for surgical technologists was \$49,710 in May 2020.

Infection Preventionists (IP)

- Infection preventionists (IPs) are professionals who make sure healthcare workers and patients are doing all the things they should to prevent infections. Most IPs are nurses, epidemiologists, public health professionals, microbiologists, doctors, or other health professionals who work to prevent germs from spreading within healthcare facilities.
- They look for patterns of infection within the facility; observe practices; educate healthcare teams; advise hospital leaders and other professionals; compile infection data; develop policies and procedures; and coordinate with local and national public health agencies.
- Certification in Infection Control and Prevention (CIC) – <https://www.cbic.org/CBIC/CIC-Certification/About-the-Examination.htm>

Infection Preventionists (IP)

You might enjoy working as an IP if you:

- Have some training or experience in public health, patient care, clinical research, or lab work
- Thrive in a variety of settings – IPs work all over healthcare facilities from the bedside, to the lab, to the executive suite
- Enjoy collaborating with and teaching colleagues from many different departments
- Like doing detective work to identify the source of a problem
- Want to make a big difference in quality and safety for healthcare workers and patients



Who are infection preventionists?

Infection preventionists use their detective skills to find the bad germs and make sure everyone is doing the right things to keep you safe.



Catheters or other devices will be placed in your body after your skin receives proper cleaning.

Healthcare workers will clean their hands before and after they care for you.



Your healthcare workers will wear gloves, gowns, and masks at the right times.

If you are in isolation, you and your visitors may need to do this too.

Your room and any equipment that is used on you will be clean.



Association for Professionals in Infection Control and Epidemiology



Infection Preventionist (IP)

- Infection Preventionist salaries currently range between \$74,427 (25th percentile) to \$91,705 (75th percentile) with top earners (90th percentile) making \$123,160 annually in Texas.

Round Rock – Nursing Building



Round Rock – Willow Hall



San Marcos – Encino Hall



Opportunities for Future Health Care Professionals

- Six professional advisors in the College of Health Professions
- Service-Learning Opportunities
- Study abroad experiences (currently on hold)
- Profession-related student organizations in all disciplines



www.health.txstate.edu/advising

Austin Community College – Health Sciences



I have been an Associate Adjunct Faculty in Biology at ACC for 27 years.

Credit Programs

- ▶ Dental Hygiene
- ▶ Diagnostic Medical Imaging - Radiology
- ▶ Emergency Medical Services Professions
- ▶ General Studies in Pre-Health Sciences
- ▶ Health Information Technology
- ▶ Medical Laboratory Technology
- ▶ Nursing - All Programs
- ▶ Nursing - Professional Nursing
- ▶ Nursing - RN-to-BSN Program
- ▶ Nursing - Vocational Nursing
- ▶ Occupational Therapy Assistant
- ▶ Pharmacy Technician
- ▶ Phlebotomy
- ▶ Physical Therapist Assistant
- ▶ Pre-Med
- ▶ Sonography
- ▶ Surgical Technology
- ▶ Veterinary Technology

#Labucate

Thanks / Questions

#Labvocate



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#Lab4Life

#WeSaveLivesEveryday



#TellYourStory / #TellOurStory about the #MedicalLaboratory!