

"The art of medicine cannot be inherited,
nor can it be copied from books..."

-Paracelsus

Career Services

A T M A C O M B C O M M U N I T Y C O L L E G E

F A L L 2 0 0 8

V O L U M E 1 4

N U M B E R 3

Allied Health Careers

Nuclear Medicine Technician

SOURCES: *cxBridges*, *America's Career Infonet* (www.acinet.org), *Discover* (www.act.org/discover), *Career Cruising* (www.careercruising.com)



The Health Care industry is booming, offering opportunities in a wide variety of positions. One of the most lucrative of these positions is Nuclear Medicine Technologist. If you think you might enjoy some patient interaction, administering medical tests, and working with highly specialized medical equipment, a career as a Nuclear Medicine Technologist might be for you! Read on to learn more!



**Macomb
Community College**

Career Services

Locations: Center Campus: G-102
South Campus: S-147

Hours: Mon. & Tues. • 8am – 7pm
Wed., Thurs. & Fri. • 8am – 4:30pm

Phone: 586.445.7321

Email: careerservices@macomb.edu

Web: www.macomb.edu

What Do Nuclear Medicine Technologists Do?

Nuclear Medicine Technologists use radioactive materials for diagnostic, therapeutic, and research purposes. They may administer radiopharmaceuticals (drugs containing radioactive substances) to patients to aid in the diagnosis of medical conditions. Once a Nuclear Medicine Technologist, or NMT, administers the drug, they then position the patient so that special equipment can trace the drug's movement through the body. The NMT is then responsible for saving the images created by the equipment to film or computer files so that they can be evaluated by a Radiologist. The vast majority of procedures NMTs perform are used to help diagnose conditions, while therapeutic and research activities account for only about a tenth of an NMT's time.

What Type Of Education Is Required?

The most common level of education amongst Nuclear Medicine Technologists is an associate degree in Nuclear Medical Technology, or

Radiation Protection. According to America's Career Infonet, (www.acinet.org), 67.9 percent of NMTs in the United States possess an associate degree.

How Much Do They Make?

In Michigan, Nuclear Medicine Technologists made between \$38,800 and \$74,100 annually in 2006, averaging \$58,760 annually, according to America's Career Infonet. Nationally, NMTs can earn as much as \$82,300!

How's The Outlook?

According to America's Career Infonet, there will be 560 annual job openings nationally for Nuclear Medicine Technologists through 2016, with 30 of those jobs finding their home in Michigan each year through 2014. That works out to be a sixteen percent increase in the number of Nuclear Medicine Technologists jobs in Michigan by 2014!

Where Can I Get More Information?

For more information on the specific education requirements for becoming a Nuclear Medicine Technologist, contact Macomb Community College's Counseling and Academic Advising Services.

Other Resources:
**American Registry of
Radiologic Technologists**
www.arrt.org

**Nuclear Medicine Technology
Certification Board**
www.nmtcb.org

**RTstudents.com-
Nuclear Medicine Resources**
www.rtstudents.com/nuclearmedicine

Society of Nuclear Medicine
<http://interactive.snm.org/>



Clinical Laboratory Technician

Clinical Lab Technicians play an important role in the detection and monitoring of diseases, and are a vital part of every patient's health-care team. They perform laboratory tests for diagnosis, treatment, and prevention of disease. They need to be accurate, pay close attention to detail, have good analytical and problem solving skills, work well under pressure, and have good computer skills. Most techs work in hospitals, doctor's offices, medical laboratories, or research and testing laboratories.

What Do Clinical Laboratory Technicians Do?

Clinical Lab Technicians (also called Medical Lab Technicians) perform routine laboratory tests. They prepare specimens and operate automatic analyzers, or perform manual tests. Clinical Lab Technicians use automated equipment, computerized instruments, microscopes, cell counters, and other lab equipment to perform their tests. They may specialize in one area or work in all areas of the lab, including histology (microscopic tissue study), phlebotomy (blood preparation and testing), cytology (cells examined for cancer or pre-cancer), hematology (the study of blood and its disorders), immunology (study of the immune system), microbiology (study of microscopic organisms), and urinalysis (analysis of the properties of urine).

What Are The Education Requirements?

A Clinical Lab Technician must graduate with an associate's degree in medical technology (or the equivalent) from an accredited two-year college. They must also have work experience in a laboratory.

How Much Do They Make?

Clinical Lab Technicians just starting out usually earn between \$20,000 and \$25,000 a year. With experience they may earn as much as \$47,000 or more, depending on where they work. In Michigan in 2006, Clinical Lab Technicians earned between \$21,300 and \$48,500 a year, with the median income being \$30,400.

How's The Outlook?

The need for Clinical Lab Technicians in Michigan is expected to grow rapidly through the year 2014, with an average of 180 job openings per year. Nationwide there is also an increase in the demand for Clinical Lab Technicians.

Important Note:

Technicians usually work under the supervision of Clinical Lab Technologists or Managers.

While there are many similarities between Clinical Lab Technicians and Clinical Lab Technologists, there are some major differences. Clinical Lab Technologists perform complex medical laboratory tests and may train or supervise staff. Technologists analyze and interpret the results of the tests, so they must have an in-depth understanding of the biological and chemical sciences. Technologists usually earn more money than technicians with an average starting salary of \$32,000 - \$40,000 a year. With experience technologists can earn as much as \$65,000 a year. They require a bachelor's degree, usually with a major in medical technology or one of the life sciences, and after graduation must complete a certifying exam. The need for technologists is also increasing, both in Michigan and nationwide, with an average of 170 job openings in Michigan annually through 2014.

Macomb Community College: Nuclear Medicine Technology Program at Center Campus

ADMISSION REQUIREMENTS: See Macomb Community College Counseling and Academic Advising for detailed information on selective admissions procedures and class information. You can also find program information online at www.macomb.edu.

The nuclear medicine curriculum is designed to prepare students for board certification as registered nuclear medicine technologists [CNMT and/or RT(N)]. Nuclear Medicine and Arts and Sciences courses are reinforced by directed clinical experiences.

Additional expenses to be met by the student are (1) a health history and physical examination including testing for tuberculosis and other communicable diseases, (2) uniforms, (3) lab and general supplies and (4) hospitalization insurance as neither the hospital nor the college insures the student against accidents or illnesses.

The Nuclear Medicine Technology Certification Board and the American Registry of Radiologic Technologists may deny certification to an applicant who has been convicted of a crime or is addicted to drugs or alcohol. Additionally students must have a criminal background check performed before they are admitted to the Program.

The Associate of Applied Science degree in Nuclear Medicine Technology program is seeking accreditation by the Joint Review Committee on Educational Programs in Nuclear Medicine Technology, 2000 W. Danforth Rd., Ste 130 #203 Edmond OK 73003. The JRCNMT's phone number is 405.285.0546



Surgical Technologist

Would you like to work in the medical field? Are you interested in the fast-paced and sometimes stressful environment of an operating room? Can you work well under stress and respond quickly? Do you have a strong stomach, and are you emotionally mature? If you answered yes to these questions then a career as a Surgical Technologist may be right for you.

What Do They Do?

Surgical Technologists (sometimes called Surgical or Operating Room Technicians) are part of a team in the operating room. They work with surgeons and nurses. Before an operation, the Surgical Technologist gets the room ready for surgery. They prepare the instruments, equipment, and supplies that will be used during surgery. They also get the patients ready for surgery and transport them to the operating room. Once there, they position the patient on the operating table and cover them with sterile drapes. Just before the surgery they help the surgical team with their gowns, masks, and gloves. During the surgery the Surgical Technologists hand instruments to the surgeon, hold retractors, cut sutures, and count items like sponges and needles to make sure everything is accounted for. They may take care of specimens removed from the patient during surgery, either disposing of it or preparing it for testing. After the surgery,



Surgical Technologists may help to move the patient to the recovery room, and then clean and restock the operating room for the next surgery.

What Kind Of Education Is Required?

There are programs for Surgical Technologists that last 9-24 months and lead to a certificate, diploma, or associate's degree. The programs include classroom education and supervised clinical experience. Some of the courses required include anatomy, physiology, microbiology, and medical terminology. During the program students also learn about surgical procedures, sterile techniques, and patient care and safety.

How Much Do They Earn?

In 2006, Surgical Technologists in the United States earned between \$25,500 and \$51,100 per year. In Michigan the average yearly

income was between \$29,200 and \$47,000. That works out to an average of \$12 to \$25 per hour.

How's The Outlook?

Through the year 2016 there is expected to be a 24% increase in the demand for Surgical Technologists in the United States. That equals about 4,740 openings per year. In Michigan, the increased demand is expected to be 14% through 2014, with an average of 70 openings per year.

Where Can I Get More Information?

Association of Surgical Technologists

www.ast.org

National Board of Surgical Technology and Surgical Assisting (NBSTSA)

www.nbstsa.org

Allied Health Careers Snapshot

Job Title	Most Common Level of Education	Percent Increase: Michigan (2004-2014)	Estimated Annual Job Availability: Michigan	Average Salary: Michigan (2006)	Percent Increase: Nationally (2006-2016)	Estimated Annual Job Availability: Nationally	Average Salary: Nationally (2006)
Cardiovascular Technologists and Technicians	Associate Degree	18%	70	\$44,960 annually	26%	1,770	\$43,800 annually
Dental Hygienists	Associate Degree	25%	240	\$59,240 annually	30%	8,210	\$63,040 annually
Diagnostic Medical Sonographers	Associate Degree	19%	60	\$54,340 annually	19%	1,490	\$58,460 annually
Health Information Technician	Associate Degree	17%	160	\$31,840 annually	18%	7,620	\$30,160 annually
Medical Assistants	Some College	34%	760	\$26,960 annually	35%	19,940	\$27,040 annually
Medical Laboratory Technicians	Associate Degree	14%	180	\$33,020 annually	15%	4,560	\$34,460 annually
Nuclear Medicine Technologists	Associate Degree	16%	30	\$58,760 annually	15%	560	\$63,400 annually
Occupational Therapist Assistants	Associate Degree	16%	20	\$39,920 annually	25%	1,020	\$42,140 annually
Physical Therapist Assistants	Associate Degree	27%	110	\$37,020 annually	32%	2,730	\$41,520 annually
Radiologic Technologists and Technicians	Associate Degree	15%	200	\$46,060 annually	15%	5,630	\$49,520 annually
Registered Nurses	Associate Degree	21%	3,500	\$58,520 annually	23%	100,080	\$59,680 annually
Respiratory Therapists	Associate Degree	18%	170	\$47,320 annually	23%	3,820	\$48,760 annually
Surgical Technologist	Post-Secondary Vocational Award	14%	70	\$37,940 annually	24%	4,740	\$37,320 annually

Macomb Community College Surgical Technology Program at Center Campus

(Selective Admissions Program)

The Surgical Technology Program is set up in a clinical career ladder fashion providing students employment opportunities and career growth while continually working toward a degree in higher education. The first opportunity is the certificate in Central Processing Distribution Technician. (This certificate is not selective admissions). Taking these courses provides the fundamentals of central processing, supply, and distribution of hospital instrumentation, supplies, and equipment. The second opportunity for students accepted into the Surgical Technology program is the Certificate in Surgical Technology. The curric-

ulum is designed to enable students to perform a variety of duties as well as provide technical support to the surgical team in an operating room before, during, and after surgery. The third opportunity for students accepted into the Surgical Technology program is the Associate of Applied Science Degree in Surgical Technology. The goal of the Associate of Applied Science degree in Surgical Technology is to provide graduates entry-level skills in surgical technology. These skills will prepare students for immediate access to the job market and provide a foundation for the baccalaureate degree in allied health or a related field. Program Coordinator Professor Elizabeth Ness can be reached at 586.286.2192.

Come Learn More About Career Services at Macomb!

Are you new to Macomb this semester? Having trouble finding a job and don't know what help is available? In need of updating your resume to showcase new skills? Then look no further than Career Services at Macomb! Come to one of our information sessions to learn about the resources available to you and meet the staff!

To register for workshops, contact Career Services at:
586.445.7321 or careerservices@macomb.edu

South Campus	Date	Day	Time	Room
	September 25	Thursday	11:00 am – 12:00 pm	S-147
	October 21	Tuesday	5:30 pm – 6:30 pm	S-147
	November 20	Thursday	11:00 am – 12:00 pm	S-147
	December 16	Tuesday	5:30 pm – 6:30 pm	S-147
	January 29	Thursday	11:00 am – 12:00 pm	S-147

Center Campus	Date	Day	Time	Room
	September 22	Monday	5:30 pm – 6:30 pm	G-102
	October 22	Wednesday	11:00 am – 12:00 pm	G-102
	November 17	Monday	5:30 pm – 6:30 pm	G-102
	December 17	Wednesday	11:00 am – 12:00 pm	G-102
	January 26	Monday	5:30 pm – 6:30 pm	G-102

Career Services offers:

- Online career research
- Career books, files, magazines, multimedia resources
- College information and catalogs
- Annual job fair
- Current job listings posted daily by tri-county employers on the MacombCareerLink job database
- Resume and cover letter assistance
- Interview preparation

Visit us on the web! www.macomb.edu

South Campus, S-147 • Center Campus, G-102
Phone: 586.445.7321 • Email: careerservices@macomb.edu

The Fall 2008 edition of the Career Services News was compiled and edited by Lauren Willey and Liz Gawel.

Volunteer in the Allied Health Field

The benefits of volunteering are vast, and the rewards numerous for those who give and receive. Volunteering can enhance your resume, increase your awareness and knowledge of your community, and leave you with relationships that will last a lifetime.

Macomb County Volunteering Opportunities

www.macombcountymi.gov/Volunteer

Southeastern Michigan Red Cross

www.semredcross.org

St. John's Health and Hospitals

www.stjohn.org/Volunteer

The Volunteer Match

www.volunteermatch.com

Applied Health wordsearch

N	A	S	X	Y	L	A	B	O	R	A	T	O	R	Y
H	U	N	D	A	I	K	V	S	Z	T	C	P	W	D
N	T	C	Q	R	B	V	U	G	W	M	L	P	B	E
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I	S	M	A	X	I	N	M	X	D	F	B	I	I	I
Y	P	A	R	E	H	T	L	A	C	I	S	Y	H	P
G	F	B	L	C	A	W	A	O	X	F	C	L	T	S
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U	M	M	L	L	V	W	S	X	A	S	E	G	W	E

CLINICAL

EXAMINATION

HOSPITAL

LABORATORY

NUCLEAR MEDICINE

NURSING

PHYSICAL THERAPY

RECORDS

RESPIRATORY

SURGICAL

TECHNICIAN

XRAY

Counseling & Academic Advising Services offers:

- Career testing and exploration
- Career decision making assistance
- Academic advising
- Transfer information
- Resource referral
- College success consultations

South Campus, H-316, 586.445.7211
Center Campus, G-132, 586.286.2228

www.macomb.edu