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Thank you for your recent inquiry regarding an interest in the field of radiology. The American College of Radiology (ACR) is not a training institution, but rather a professional association consisting of more than 32,000 members who are physicians or physicists specializing in radiology or radiation oncology.

Radiologists are physicians who are concerned with the diagnosis of disease and its treatment — especially in the field of oncology (cancer therapy). The Web site we developed, www.myradiologist.com, offers detailed information on what a radiologist does and the training required to become one.

Preparation for becoming a radiologist usually begins during high school and college and should include extensive course work in mathematics, biology, chemistry, and physics as well as a broad base in the humanities. To become a radiologist, one must successfully complete four years of medical school and a four- to five-year residency with specialization in radiology. Upon completion of an accredited residency training program, one must pass examinations (oral and written) of the American Board of Radiology to become certified as a radiologist.

The educational background of a *radiological physicist* includes four years of college and graduate study leading to a Master of Science or Ph.D. degree. As with radiologists, one must also pass oral and written examinations of the American Board of Radiology to become certified as a radiological physicist.

The field of radiology also offers fulfilling careers for technologists — those not desiring to become a physician or physicist. Radiographers, radiation therapy technologists, nuclear medicine technologists, and sonographers are some of the career options available. Educational requirement in these fields differ. In some instances, high school graduates may enter training programs in hospitals; other programs require work at community colleges or four-year degree programs.

Many people have found it particularly useful to speak with radiologists at various institutions as well as those in private practice. In this way, they are presented with a variety of viewpoints and also have an opportunity to observe how radiologists spend their day.

The attached sheets list organizations and materials from which you may obtain additional career information.

RADIOLOGYINFO™
The radiology information resource for patients

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ACR RSNA

Developed jointly by the American College of Radiology & The Radiological Society of North America

- ▶ Diagnostic Radiology
- ▶ Interventional Radiology
- ▶ Nuclear Medicine
- ▶ Radiation Therapy

Procedures A to Z

Radiology in Motion

Image Gallery

Downloads for physicians

Welcome to RadiologyInfo

Radiotherapy

RadiologyInfo is designed to answer your questions related to the many radiologic procedures and therapies available to you and your family. The Web site provides you with information whether you're preparing for a baseline mammogram, learning more about your child's x-ray, or researching radiation oncology (cancer therapy) procedures.

RadiologyInfo tells you how various x-ray, CT, MRI, ultrasound, radiation therapy and other procedures are performed. It also addresses what you may experience and how to prepare for the exams. The Web site does not yet cover all radiologic procedures and therapies, but is updated frequently with new information.

All material on the *RadiologyInfo* Web site is reviewed and approved by experts in the field of radiology from the ACR and RSNA, as well as other professional radiology organizations.

New Developments in Radiology

What does a Radiologist do?

Helpful Links

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ACR RSNA

Without a radiologist, your doctor may be operating in the dark.

Careers

Understanding Radiology

- Your Radiologist
- What You Should Know About Quality and Safety in Medical Imaging
- ACR Accreditation
- Quality Standards for Medicare

Careers in Diagnostic Radiology

- Radiologist
- Subspecialties
- Radiological Technologist
- Radiological Nurse

Careers in Radiation Therapy

- Radiation Oncologist
- Medical Radiation Physicists
- Radiation Therapists
- Dosimetrists
- Radiation Oncology Nurses
- Social Workers
- Dietitians

Print this page

Organizations to Contact

Accreditation Council for Graduate Medical Education (ACGME)312-755-5000
515 N. State St., Suite 2000, Chicago, IL 60610
www.acgme.org

American Association of Medical Dosimetrists (AAMD)301-209-3320
One Physics Ellipse, College Park, MD 20740
www.medicaldosimetry.org

American Association of Physicists in Medicine (AAPM)301-209-3350
One Physics Ellipse, College Park, MD 20740
www.aapm.org

American Healthcare Radiology Administrators (AHRA)800-334-2472; 978-443-7591
490B Boston Post Rd., Suite 101, Sudbury, MA 01776
www.ahraonline.org

American Medical Association (AMA)800-621-8335
515 N. State St., Chicago, IL 60610
www.ama-assn.org

American Registry of Radiologic Technologists (ARRT)651-687-0048
1255 Northland Dr., St. Paul, MN 55120
www.rrt.org

American Society of Radiologic Technologists (ASRT)800-444-2778; 505-298-4500
15000 Central Ave. S.E., Albuquerque, NM 87123
www.asrt.org

Association of American Medical Colleges (AAMC)202-828-0400
National Resident Matching Program (NRMP)866-617-5838; 202-828-0566
Fellowship Matching Program (NRMP)866-617-5834; 202-862-6077
2450 N St. N.W., Washington, DC 20037
www.aamc.org

Council of Medical Specialty Societies (CMSS)847-295-3456
51 Sherwood Terrace, Suite M, Lake Bluff, IL 60044
www.cmss.org

Society of Nuclear Medicine (SNM)703-708-9000
1850 Samuel Morse Dr., Reston, VA 20190
www.snm.org

Publications and Materials

Careers in Medicine, authored by T. D. Rucker and M. D. Keller

Directory of Graduate Medical Education Programs, published by the American Medical Association

Choosing a Medical Specialty, published by the Council of Medical Specialty Societies

Your Career Opportunities in Radiologic Technology, published by the American Healthcare Radiology Administrators

Radiology Facts

For information on medical schools and radiology

Accreditation Council for Graduate Medical Education (ACGME)312-755-5000
515 N. State St., Suite 2000
Chicago, IL 60610
www.acgme.org

To become a radiologist

You need an undergraduate degree and then four years of medical school and five years of radiology residency.

The cost varies and the Association of Medical Colleges (AAMC) in Washington, D.C., is a contact for pricing. (See *Resident matching programs* below for contact information.)

Working hours

The work schedule varies with subspecialty. The typical radiologist works 8–10 hours a day.

Resident matching programs (NRMP)

Association of American Medical Colleges (AAMC)202-828-0400
2450 N St. N.W.
Washington, DC 20037
www.aamc.org

National Resident Matching Program866-617-5838; 202-828-0566

Fellowship Matching Program866-617-5834; 202-862-6077

Other Career Options in Radiology

Radiologic technology and sonography are sciences combining advanced technology and human compassion. Radiologic technologists and sonographers use their knowledge of physics, human anatomy, and physiology to create permanent medical images. These professions require a dependable personality with a mature and caring nature. Radiologic services are offered in various settings such as hospitals health care facilities, physicians' offices, mobile imaging facilities, industrial plants, research centers, government agencies, and in commercial sales and marketing.

People entering this profession may specialize in their own area or pursue careers as educators, researchers, consultants, or administrators. The constant growth in this field has created many new and exciting career opportunities.

While salaries may vary nationwide, the range is usually reflective of training, education, and experience. Excellent benefits packages often accompany a higher-than-average pay scale. Employment opportunities are available nationwide and offer the radiologic technologist and sonographer flexible work situations to accommodate various lifestyles and needs. Many hospital- and college-based programs offer financial assistance for qualified students.

Admission requirements may vary, but basic math and science skills are important. Educational programs are accredited by the Committee on Allied Health Education and Accreditation.

Nuclear Medicine Technologist

Nuclear medicine technologists are specialized members of the diagnostic imaging health care team. These individuals actively participate in the performance of diagnostic imaging procedures that demonstrate the anatomy and physiology of the human body. These procedures are performed following the administration of radioactive drugs to patients, after which images are created with gamma cameras of the distribution and concentration of that radioactive drug. Nuclear medicine educational programs include instruction in physics, computers, instrumentation, radiobiology, pharmacology, anatomy, physiology, and the safe use and disposal of radioactive materials.

Certification requirements

- Most employers require certification by a national credentialing body, either the American Registry of Radiologic Technologists (ARRT) or the Nuclear Medicine Technologist Certification Board (NMTCB)
- State licensure may also be required in many instances

Educational programs

1. Four-year baccalaureate degree program
2. Two-year associate degree program
3. Two-year hospital-based certificate program
4. One-year certificate program

Career opportunities

Employment opportunities are diverse. An individual may work as a staff or supervisory technologist in a hospital, imaging center, or laboratory. You could also begin a career in research and development, education, or sales and marketing.

For more information, contact

- Joint Review Committee on Educational Programs in Nuclear Medicine Technology (JRCNMT)
2000 W. Danford Rd., Suite 130, #203, Edmond, OK 73003405-285-0546
www.jrcnmt.org
-or-
- Society of Nuclear Medicine, Technologist Section (SNMTS)
1850 Samuel Morse Dr., Reston, VA 20190703-708-9000
www.snm.org

Radiation Therapy Technologist

The radiation therapy technologist is responsible for treating patients with a radiation beam or “source.” This health care professional delivers the dose of radiation to the area prescribed by the physician. Radiation therapy patients are treated for cancer and the technologist who works with patients usually develops a special supportive relationship with the patient and family members.

Radiation therapy technologists must possess a high degree of sensitivity and caring in addition to excellent technical skills.

Certification requirements

- Most employers require certification in radiation therapy by the American Registry of Radiologic Technologists (ARRT)
- State licensure may be required

Educational programs

1. Four-year baccalaureate degree program
2. Two- to three-year associate degree with special consideration given to registered radiologic technologists
3. Two-year hospital certificate program
4. One-year certificate program after completion of an accredited radiography program

Career opportunities

Areas of opportunity include hospitals, freestanding clinics, research, and sales and marketing.

For more information, contact

- Joint Review Committee on Education in Radiologic Technology (JRCERT)
20 N. Wacker Dr., Suite 2850, Chicago, IL 60606312-704-5300
www.jrcert.org
-or-
- American Society of Radiologic Technologists (ASRT)
1500 Central Ave. S.E., Albuquerque, NM 87123800-444-2778; 505-298-4500
www.asrt.org

Radiographer

The term *diagnostic radiography* is used to describe a variety of radiographic or X-ray examinations. Most people are familiar with chest X-rays and also know that X-rays are the best way to diagnose broken bones. The radiographer performs these procedures as well as procedures that use contrast agents, which make it possible to study organs and blood vessels that otherwise cannot be seen. Radiographers are valued members of the health care team. Through a blend of classroom and clinical training, students learn radiographic equipment operation, patient positioning technique, radiation safety, and patient care. Advanced opportunities in computed tomography, cardiovascular interventional technology, and magnetic resonance imaging are available to the radiographer.

Certification requirements

- Most employers require certification as a radiographer by the American Registry of Radiologic Technologists (ARRT)
- State licensure may also be required

Educational programs

1. Four-year baccalaureate degree program
2. Two-year associate degree program
3. Two-year hospital certificate program

Career opportunities

Opportunities are varied at this level. Positions are available in hospitals, private medical clinics, sales and marketing, research, and commercial areas.

For more information, contact

- Joint Review Committee on Education in Radiologic Technology (JRCERT)
20 N. Wacker Dr., Suite 2850, Chicago, IL 60606312-704-5300
www.jrcert.org
-or-
- American Society of Radiologic Technologists (ASRT)
1500 Central Ave. S.E., Albuquerque, NM 87123.....800-444-2778; 505-298-4500
www.asrt.org

Diagnostic Medical Sonographer

A diagnostic medical sonographer combines creativity and advanced technological ultrasound equipment to produce images of the body.

Sonographers use high-frequency sound waves (much like sonar) that demonstrate body parts and assist the physician in the diagnosis of medical abnormalities. The sonographer must have exceptional understanding of human anatomy and an artistic, creative, self-directed approach for locating and demonstrating anatomy and pathology.

Certification requirements

- Most employers request a certification from the American Registry for Diagnostic Medical Sonography (ARDMS)
- Specific requirements for certification can be obtained through the

American Registry for Diagnostic Medical Sonography (ARDMS)
51 Monroe St., Rockville, MD 20850301-738-8401
www.ardms.org

Career opportunities

Career opportunities are available in hospitals, imaging centers, educational institutions, physicians' offices, clinical research labs, and in equipment sales and marketing. Sonographers may work in departments of radiology, cardiology, obstetrics, and vascular surgery.

Educational programs

(Specialized programs vary in length, depending on geographic location.)

1. Four-year baccalaureate degree program
2. Two-year associates degree program
3. One-year certificate program

A list of educational programs and additional information can be obtained through the

- Society of Diagnostic Medical Sonography (SDMS)
2745 Dallas Pkwy., Suite 350, Plano, TX 75093800-229-9506; 214-473-8057
www.sdms.org
-or-
- Joint Review Committee on Education in Diagnostic Medical Sonography (JRC-DMS)
2025 Woodlane Dr., St. Paul, MN 55125.....651-731-1582
www.jrcdms.org