

Saint Louis University

Doisy College of Health Sciences **Saint Louis University**





Come visit
our
beautiful
campus!

Mission Statement

Rooted in Jesuit ideals, the Doisy College of Health Sciences serves humanity through education, research and engagement.

Competitive Application

Find your passion

- **Shadowing** (hospital, clinic, senior living. Shadowing someone at school)
- **Volunteer** (Cardinal Glennon Children's Hospital Foundation, Red Cross, Fight For Air Climb American Lung Association, Missouri Area Health Education Centers (MAHEC), etc.)
- **Clubs/Organizations** (HOSA, Sports Medicine Club, etc.)
- **Learn/Research** (research areas of interest online, watch videos to educate yourself, look on association websites)
- **Summer Camps** (check with local/out of state universities)

Competitive Application

- Concentrate on science and math courses. Take additional courses in science rather than math if given the choice, unless you plan to major in mathematics or biomedical engineering. In that case, you should take as many math courses as possible.
- Consider taking Advanced Placement and/or Advanced Credit courses whenever possible. Advanced coursework in science and math is excellent preparation for pre-professional health studies in college. Medical schools generally do not accept AP/AC credit for biology, chemistry or physics. Students are encouraged to take these courses at a four-year college or university.

Applying to College

- Recommendation Letters
- Essay
- Resume
 - Sports, clubs, organizations, work, volunteer, etc.
 - Be descriptive

SLU Scholars Programs

- Medical Scholars
- Nutrition and Dietetics Scholars
- Pharmacy Scholars
- Physician Assistant Scholars
- Law Scholars

How to Prepare in College

Get involved

- Shadowing, Volunteer, Clubs/Organizations
- Leadership roles, Study Abroad, Internships

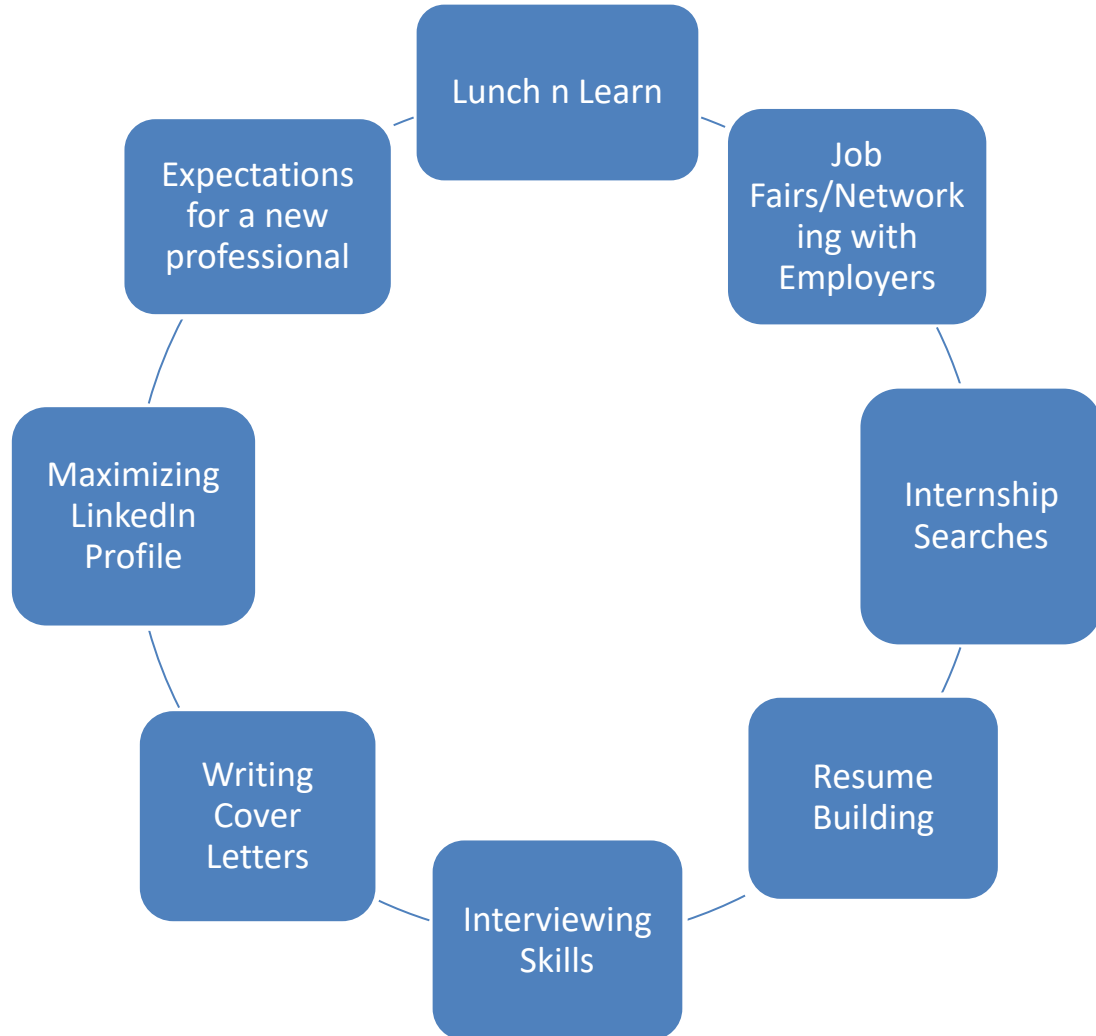
Honors Program/Honors Courses

- Experiential learning options that happen outside classroom for honors enhanced opportunity
- Independent/Collaborative research projects

Use University/College Resources

- Career Services, Writing Center, Tutoring, Pre-Health Office

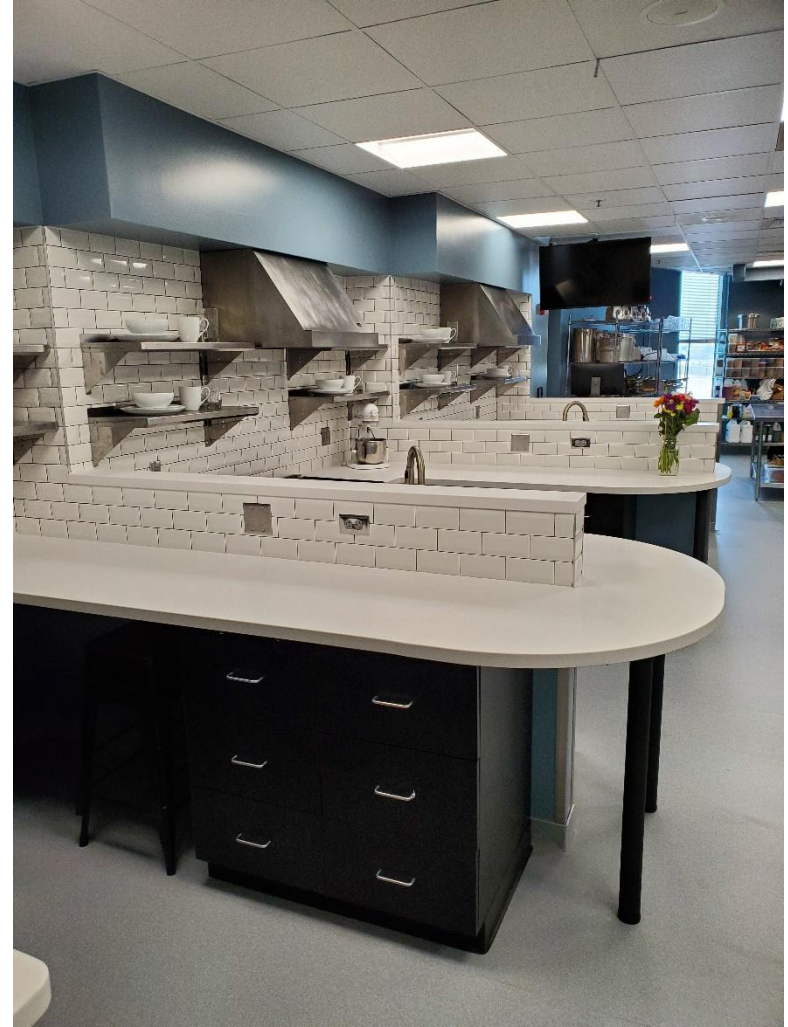
How SLU helps prepare students for after graduation



School of Nursing

- Baccalaureate, Master's, Post-Master's and Doctoral level
 - B.S.N
 - A.B.S.N
 - A.M.S.N
- Learn methods of interprofessional collaboration that are critical for caring for the whole person.

Nutrition and Dietetics



Nutrition and Dietetics



Nutrition and Dietetics



Nutrition and Dietetics

- Dietetics- application of food & nutrition knowledge to promote health, prevent disease & minimize disability.
 - Help individuals attain better health and longevity using sound nutrition practices
 - Develop patient centered care plans
 - Demonstrate nutrition education methods to facilitate diet changes

Nutrition and Dietetics

- Careers:
 - Hospitals
 - Food service
 - Private practice
 - Community & public health settings
 - Universities
 - Research
 - Journalism
 - Sports nutrition
 - Corporate wellness
 - Schools
 - Sales

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Speech, Language & Hearing Sciences (Speech Language Pathology)



Speech, Language & Hearing Sciences (Speech Language Pathology)



Speech, Language & Hearing Sciences (Speech Language Pathology)



Speech, Language & Hearing Sciences

(Speech Language Pathology)

- Prepares students to become a Speech Language Pathologist or Audiologist
 - Prevent, Assess, Identify, and Treat:
 - Speech, Language, Social communication, Cognitive communication, Swallowing
 - Audiologists
 - Prevent, Assess, Identify, and Treat:
 - Hearing and Balance
- Speech-Language-Hearing Clinic. Child Daycare.

Speech, Language & Hearing Sciences

(Speech Language Pathology)

- Careers:
 - Schools
 - Hospitals
 - Rehabilitation agencies
 - Nursing homes
 - Private practice / clinics
 - Health care facilities
 - Research assistants
 - Patient care advocates
 - Professor / teaching

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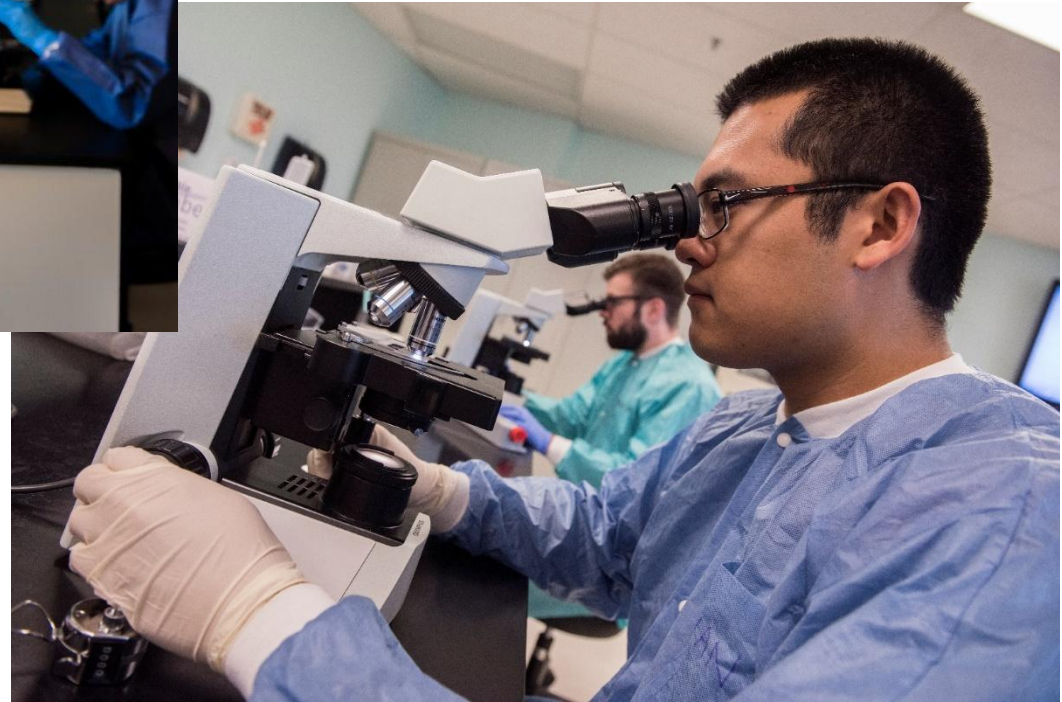
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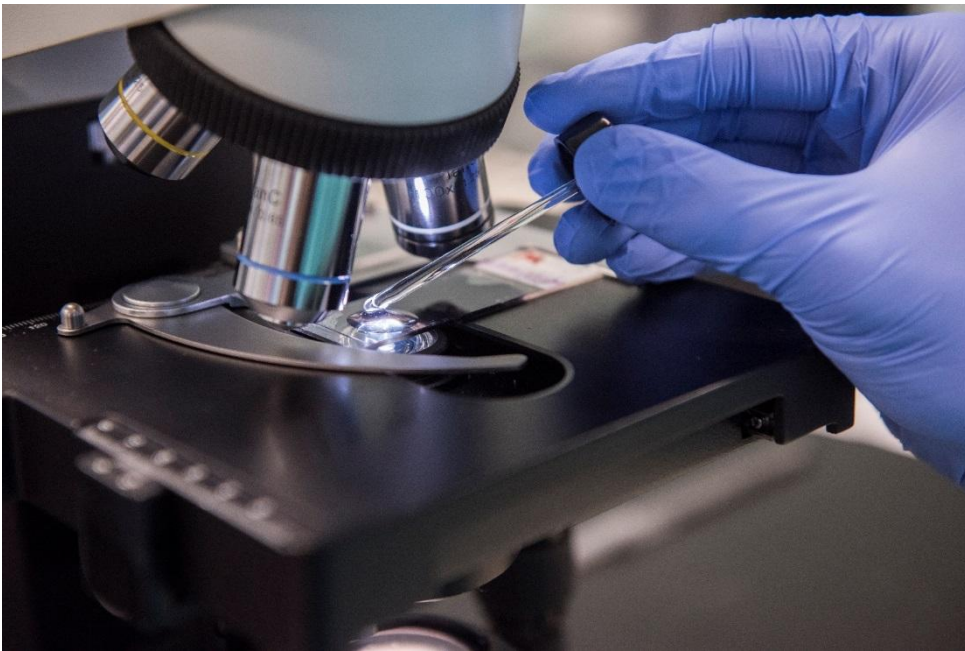
Medical Laboratory Sciences



Medical Laboratory Sciences



Medical Laboratory Sciences



Medical Laboratory Sciences

- Analysis contributes critical data to diagnose diseases in order to treat patients. They perform and assure the reliability of tests, which provides critical data used in the detection, diagnosis, monitoring and treatment of diseases.
- 80% of diagnostic decisions are made based upon laboratory results
- Gain knowledge of following areas:
 - Chemistry (analyze chemicals, proteins, fats, and sugars in the blood)
 - Hematology (test for anemias, leukemias, clotting & bleeding disorders)
 - Immunology (test for diseases & conditions that affect the immune system)
 - Urinalysis (evaluates kidney function)
 - Blood bank (test patient & donor blood for transfusions)
 - Microbiology (grow & identify bacteria, viruses, parasites, & fungi that cause infections)

Medical Laboratory Sciences

- Careers:
 - Qualified to work in 5 major areas of lab: blood bank, chemistry, hematology, immunology & microbiology
 - Clinical laboratory
 - Research
 - Forensic science / crime labs
 - Laboratory equipment companies
 - Pharmaceutical / biotechnology industries
 - Universities / Professors

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Athletic Training



Athletic Training



Athletic Training



Athletic Training

- Practice injury prevention, injury assessment, immediate management of athletic injury, rehabilitation, and sport specific conditioning, administrative duties, and professional development.

Athletic Training

- **Careers:**
 - High Schools / Colleges and Universities
 - Professional Sports
 - Sports medicine clinics
 - Military, law enforcement, tactical teams
 - Performing arts
 - Industrial organizations
 - Clinical researchers
 - Administration / Faculty members / Clinical instructors

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Health Information Management



Health Information Management

- **Health Information Management** convergence of medical sciences, data analytics, informatics, information technology, legal principles, and administration.
- Health Information professionals analyze data to identify areas for improvement, enhance patient safety and outcomes, reduce costs, optimize operations, help others make informed decisions, address public health concerns and more.
- Their role bridges clinical, operational, and administrative functions within the healthcare industry.

Health Information Management

- Careers
- **HIM Professionals** work in every sector of the healthcare industry, including health systems, healthcare consulting, technology vendors, government agencies, insurance, finance, billing services, and policy development.

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Health Sciences



Health Sciences

- Health sciences opens doors to diverse career paths. The curriculum delves into medical sciences, anatomy and physiology, research methods and more.
- Program offers many pre-professional tracks such as Pre-PA, Pre-OT, Pre-PT, Pre-Med.

Health Sciences

- Careers:
 - Health care coordinators
 - Case managers
 - Corporate wellness administrator
 - Patient advocate/patient navigator
 - Health literacy educator
 - Hospitals
 - Medical service organization
 - Federal, state and local health agencies
 - Long-term care facilities

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Physical Therapy



Physical Therapy



Physical Therapy

- Physical therapists work with people across the lifespan to optimize movement and improve health. Physical therapists are responsible for the examination and evaluation of patients/clients, the development and implementation of intervention programs, patient education and the supervision of other health care practitioners.
- Helps improve their movement and physical function, manage pain and other chronic conditions, and recover from and prevent injury and chronic disease.

Physical Therapy

- Careers
 - Hospitals
 - Outpatient clinics
 - Long-term rehabilitation facilities
 - Collegiate and professional sports
 - Schools
 - Patient homes and fitness centers
 - Military
 - Private practice
 - Nursing homes
 - Corporate offices
 - Assisted Living Facilities

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Occupational Therapy



Occupational Therapy



Occupational Therapy

- OT is the study of the form, function, and meaning of human activity and how everyday activities influence both individuals and communities.
 - Utilizes everyday activities in the service of helping people to live healthy and satisfying lives.
 - Emphasize “occupations”, defined as activities a person needs, wants or has to do.
 - Services are provided to individuals who are at risk, or who have disabling conditions or life circumstances that prevent full participation in the roles and activities that are valued.

Occupational Therapy

- Careers:
 - Hospitals / out-patient clinic
 - Nursing homes / Home health services
 - Schools / Universities / Research / Professors
 - Community settings
 - Consultation to industry

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Medical Sciences



Medical Sciences



Medical Sciences

- Focuses on human health and diagnostic studies.
- Medical courses in areas of diagnostic medicine such as urinalysis and body fluids, medical biochemistry, hematology and hemostasis, fundamental immunology, immunohematology and medical microbiology.
- A great pre-professional program for students looking to advance in health care education and ideal for preparation for medical, physician assistant, dental, pharmacy, optometry or other health-related graduate programs.

Medical Sciences

- Careers:
 - Biotechnology technician
 - Pharmaceutical technical or sales representative
 - National Institutes of Health
 - Centers for Disease Control
 - Pharmaceutical research
 - Universities medical research
 - Federal, state, or municipal crime lab programs
 - Veterinary science
 - Public health

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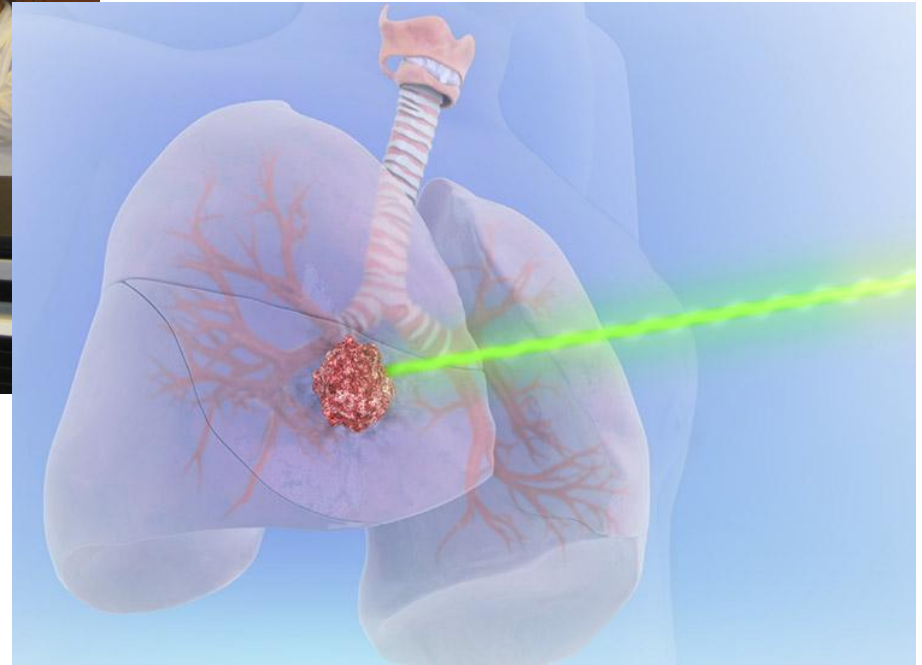
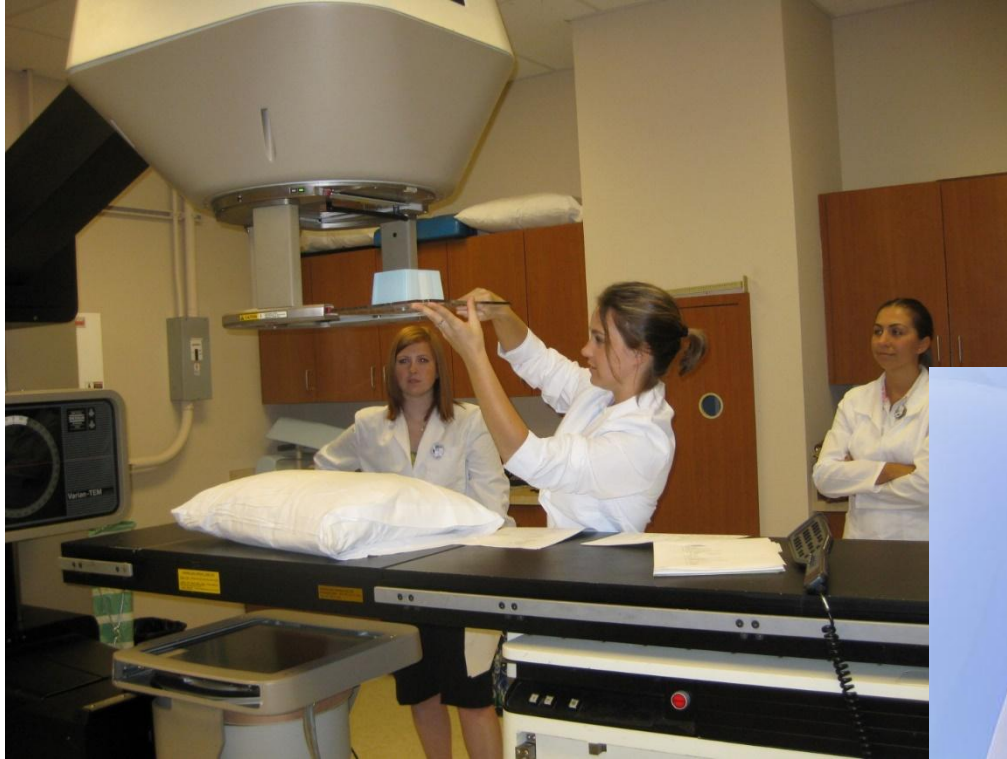
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Radiation Therapy



Radiation Therapy



Radiation Therapy

- Prepare and treat already diagnosed cancer patients with high energy radiation using highly specialized equipment
 - Plan and administer doses of radiation using linear accelerators
 - Monitor patient's reactions for side effects / keep highly accurate records of planning, treatment & equipment use
 - Treatments are to cure patient of cancer or to relieve painful symptoms of the disease to improve patient's quality of life
 - Part of a multi step process to treat cancer. Targets cancer cells that can not repair themselves after receiving radiation, so the cancer cells no longer reproduce
- Team work required: patient interaction necessary

Radiation Therapy

- Careers:
 - Part of a multidisciplinary health care team working with radiation oncologist, medical physicists, nurses etc.
 - Hospitals / clinics
 - Treatment planning
 - Health care administration
 - Equipment sales / training
 - Professor / Research

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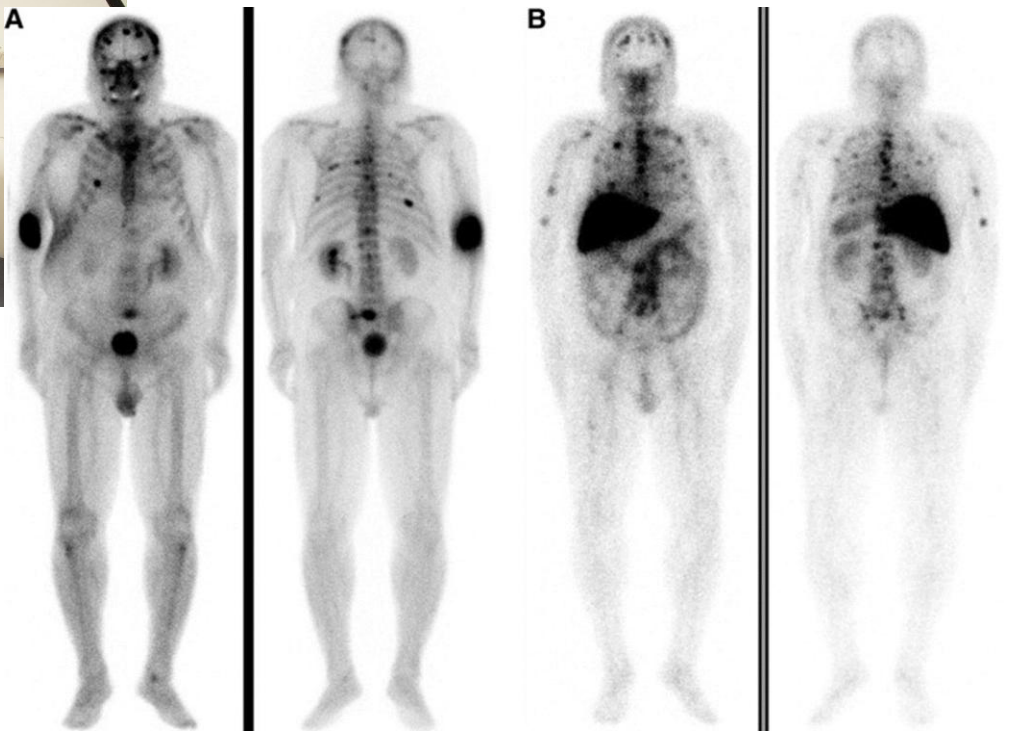
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Nuclear Medicine Technology



Nuclear Medicine Technology



Nuclear Medicine Technology

- Administer radioactive labeled products (injected, inhaled, ingested). Monitor patients for reactions and during procedures. Perform post processing of data
- A diagnostic tool
- Can be used in the treatment of disease
- Documents organ function and structure
- Uses very small amounts of radioactive materials (radiopharmaceuticals)
- Radiopharmaceuticals in the body are detected by special cameras

Nuclear Medicine Technology

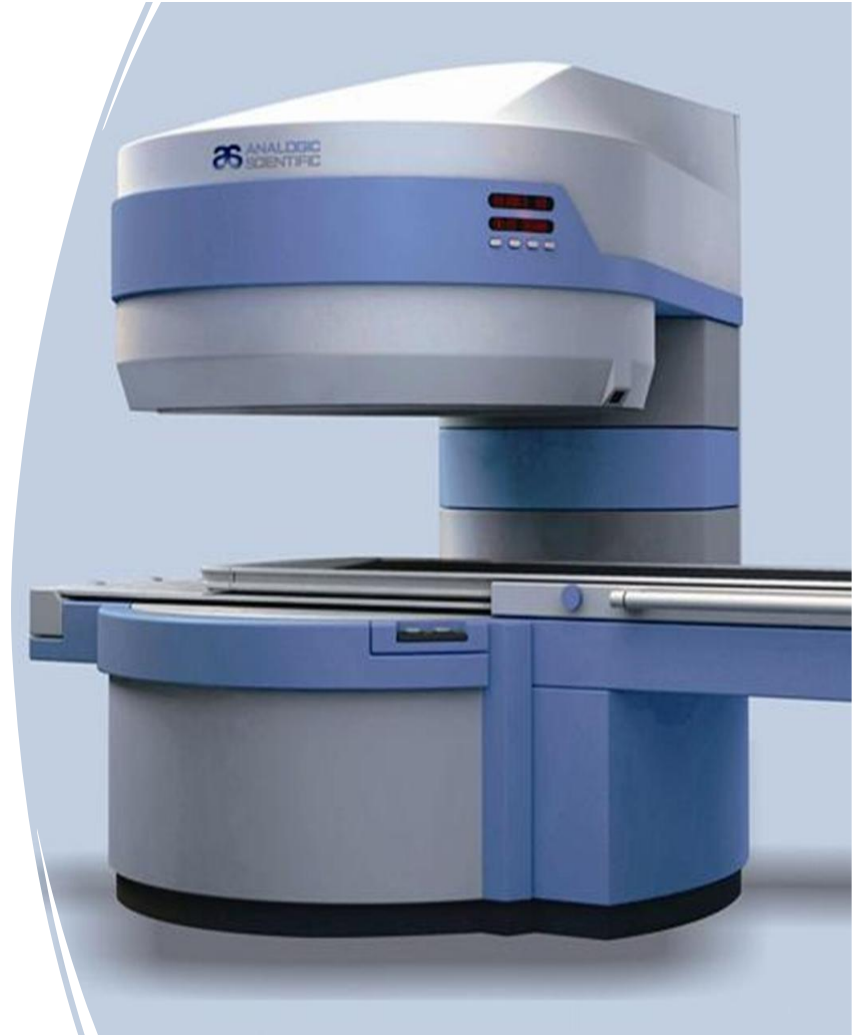
- Careers:
 - Work closely with broad span of medical specialties such as pediatrics, cardiology and oncology.
 - Technologist in hospitals & clinics
 - Information technology
 - Health care administration
 - Sales and training
 - Radio-pharmacy labs
 - Professor
 - Research

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Magnetic Resonance Imaging



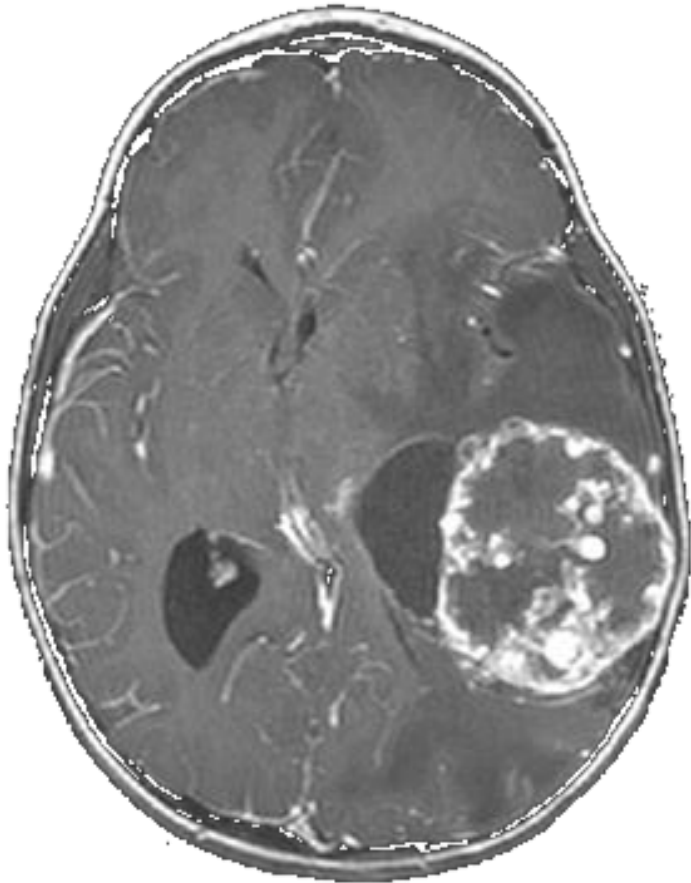
Magnetic Resonance Imaging



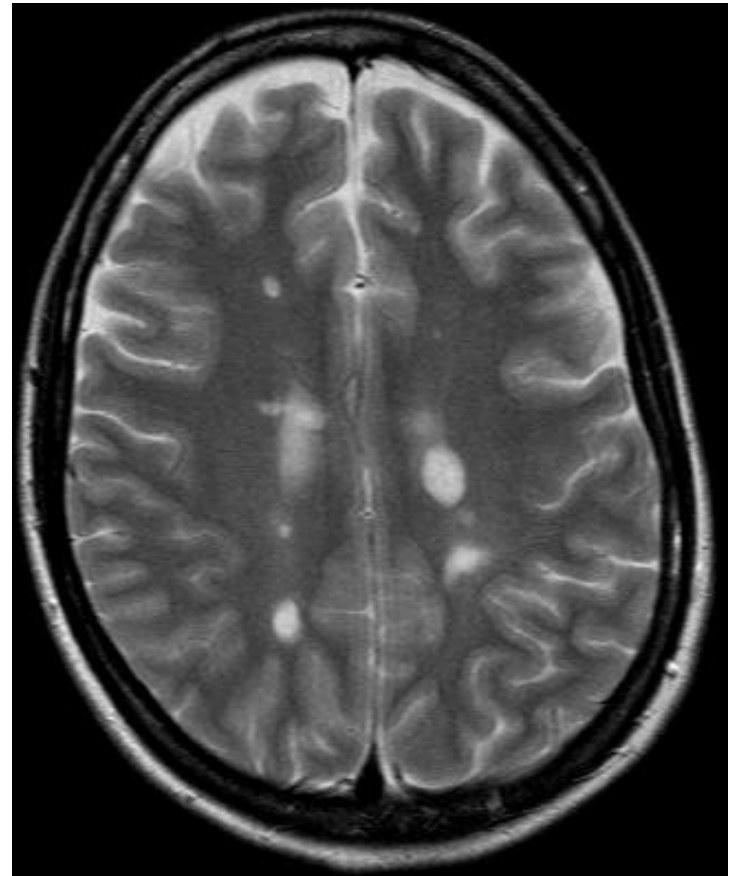
Magnetic Resonance Imaging



Magnetic Resonance Imaging



Brain Tumor
Multiple Sclerosis



Magnetic Resonance Imaging

- Medical imaging specialty used to visualize detailed structures within human body
 - Provide contrast between soft tissues of body
 - Useful in imaging brain, heart, muscles, spine, joints and other structures
 - Utilizes a constant and powerful magnetic field and radiofrequency energy
 - Creates pictures of internal body structures

Operation of imaging, lab and computer instrumentation

Magnetic Resonance Imaging

- Careers:
 - Works closely with broad span of medical specialties such as neurology, sports medicine, cardiology, pediatrics and more.
 - Medical and surgical hospitals
 - Freestanding clinics
 - Physician offices
 - Research institutions
 - Sales
 - Research
 - Some jobs are classified as traveling jobs

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Physician Assistant



Physician Assistant



Physician Assistant

- PA's are licensed clinicians who practice medicine in every specialty and setting. Dedicated to expanding access to care and transforming health and wellness through patient-centered, team-based medical practice. PA's generalist medical training enables them to provide a wide spectrum of patients care and treat the whole patient.

Physician Assistant

- Take medical histories
- Conduct physical exams
- Diagnose and treat illness
- Order and interpret tests
- Develop treatment plans
- Prescribe medication
- Counsel on preventative care
- Perform procedures
- Assist in surgery
- Make rounds in hospitals and nursing homes

Physician Assistant

- Careers:
 - Medical and surgical specialties
 - Hospitals
 - Clinics
 - Nursing homes
 - Physician offices
 - Outpatient centers

Physician Assistant

- Careers Specialties
 - Anesthesia
 - Cardiology
 - Dermatology
 - Emergency medicine
 - ENT
 - Family medicine
 - Neurology
 - OBGYN
 - Radiology
 - Pediatrics
 - Surgery

Questions?

