

DEPARTMENT OF DIAGNOSTIC
IMAGING TECHNOLOGY



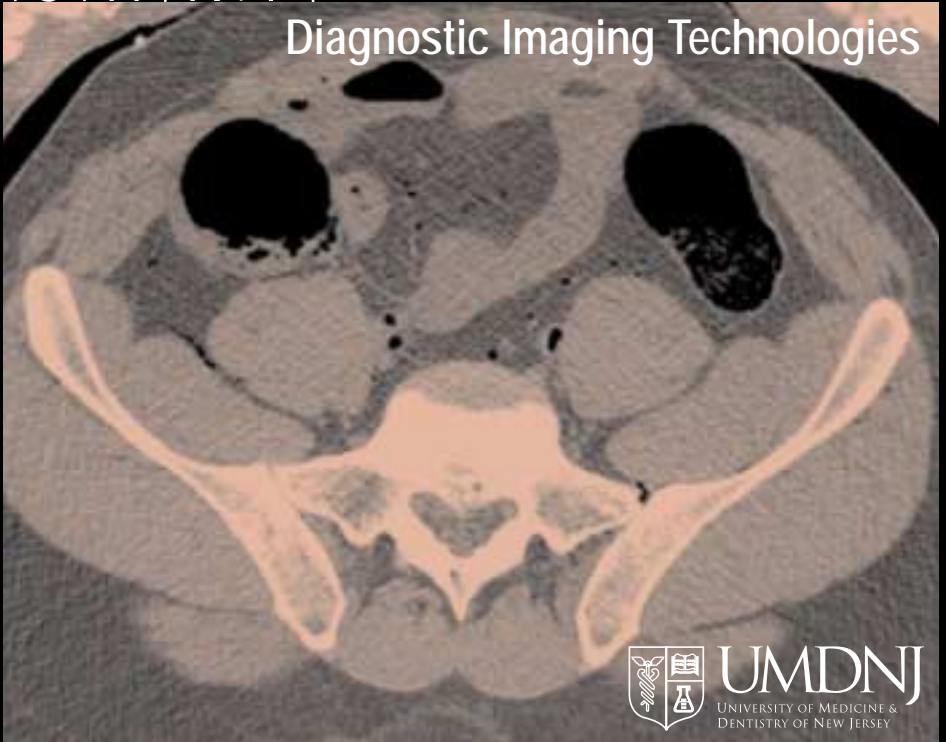
it's all
about:

Choices...

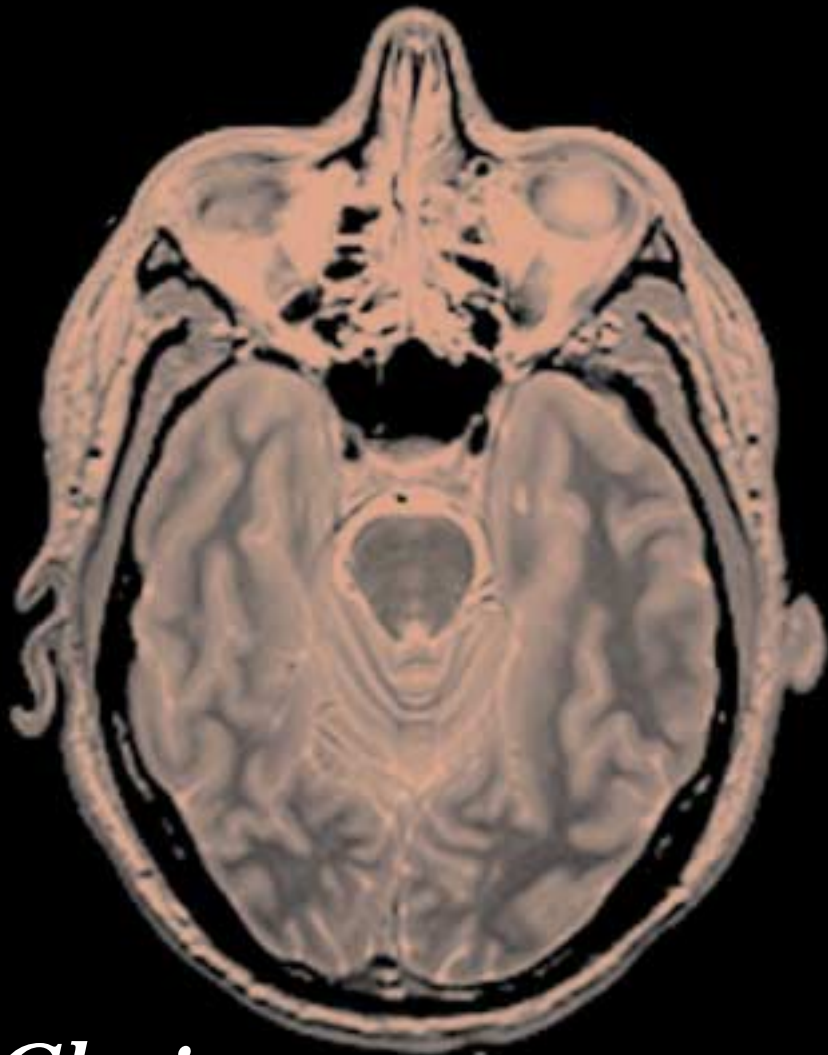
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School of Health Related Professions

Diagnostic Imaging Technologies



UMDNJ
UNIVERSITY OF MEDICINE &
DENTISTRY OF NEW JERSEY



Choices...

Students who choose UMDNJ's School of Health Related Professions want a University that is exclusively dedicated to health care, with state-of-the-art equipment, rigorous coursework, and faculty who cares. All our resources go toward supporting a health care educational environment that attracts and nurtures the very best faculty and students.

Now is the time to start realizing your potential!!!

If you are a Diagnostic Radiologic Technologist who would like to expand your career opportunities, increase your knowledge and earn a certificate, the School of Health Related Professions' Diagnostic Imaging Technologies Program is designed to help you reach your goal. The program combines a strong academic curriculum and intensive clinical training to provide a program that is comprehensive in its methods and capable of thoroughly training students in the advanced practices of Computed Tomography, Magnetic Resonance Imaging, Mammography and Quality Assurance.

Upon completion of the required courses you will be eligible to sit for the American Registry of Radiologic Technologist's (ARRT's) advanced level examinations in Computed Tomography, Magnetic Resonance Imaging, Mammography and/or Quality Assurance. You will also be in a position to advance your career and seek challenging new positions in a wide range of options.

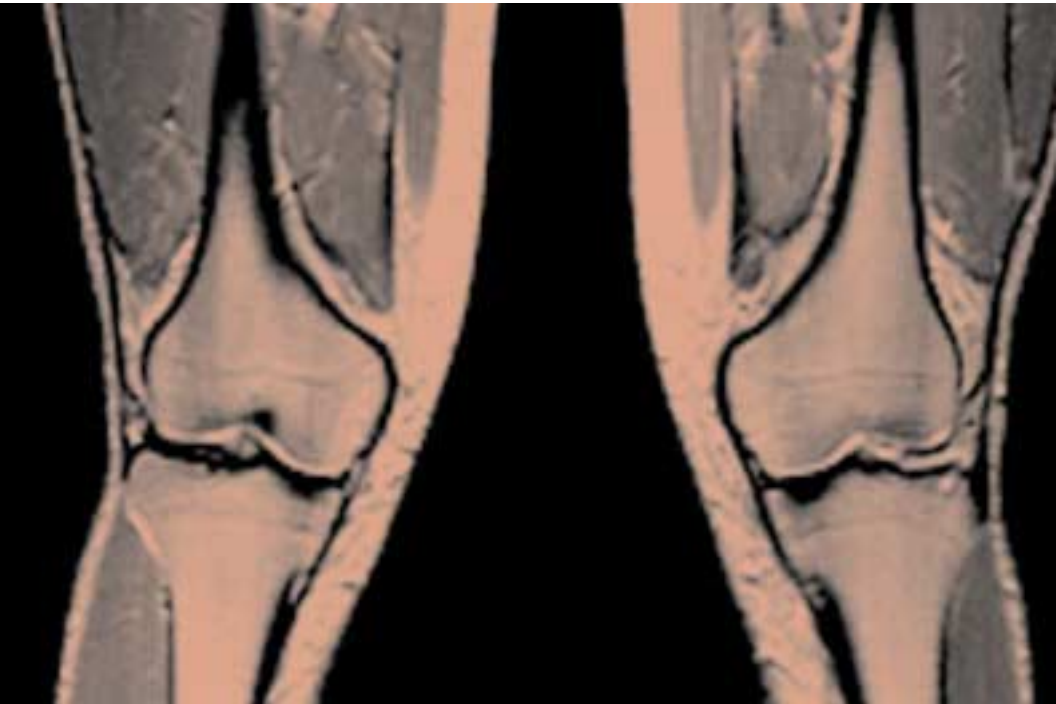


Opportunities include:

- Advanced Imaging positions in Imaging Centers,
- Advanced Imaging positions in Hospital Imaging Departments,
- Applications Specialists with Equipment Manufacturers
- Educators with Commercial Firms, Schools, and Colleges.

The program meets the needs of students already in the workforce by offering courses via distance learning and the Internet, and a variety of courses during evening sessions. Clinical schedules are extremely flexible and are arranged on an individual basis according to student needs.

Upon completion of the program, students receive a certificate from the UMDNJ/SHRP and are eligible to sit for the ARRT advanced level examination in their particular specialty. In addition, all credits earned in the certificate program help fulfill course requirements for, and are directly transferable to the Bachelor of Science in Health Sciences degree program.



Frequently Asked Questions

What is the University of Medicine and Dentistry of New Jersey (UMDNJ)?

UMDNJ is the state university of the health sciences. There are eight schools on five campuses across New Jersey. UMDNJ is the largest university of its kind in America and is a leader in health care research, education, and patient care.

What is SHRP?

SHRP stands for the School of Health Related Professions, one of eight schools at UMDNJ. Our specialization is two-fold: (1) Preparing students for entry-level health care careers. (2) Educating health professionals for career advancement.

What types of degrees and programs does SHRP offer?

SHRP has 34 programs at all academic levels. Many programs are offered in conjunction with one or more of our twenty-eight affiliate institutions.

What roles within health care will the certificate in Advanced Imaging Sciences prepare me to assume?

The Diagnostic Imaging Technologies Program is designed to permit graduates to branch out into the advanced imaging modalities. Possible career avenues for graduates in the radiological sciences include positions as advanced imaging technologists in imaging facilities and hospitals, as educators, and or instructors. Additional career opportunities exist within commercial firms as product sales specialists, application specialists and educators. All career opportunities offer competitive salaries and attractive benefits.



Admission/Registration

Where do I apply for admission?

UMDNJ, School of Health Related Professions, Office of Enrollment Services, 65 Bergen Street, Room 101, Newark, NJ 07107-3001 (973) 972-5453. Complete the application and select your affiliate.

Do I need licensure and college credits to enter the program?

Yes. In order to qualify for admission applicants must meet the following requirements: 1) Graduation from a Joint Review Committee on Education in Radiologic Technology approved Diagnostic Radiography program; 2) cumulative grade point average of 2.5 or higher; 3) Possess 6 credits of college level English/Written Expression or equivalent courses with at least a grade of "C"; 4) possess 3 credits of college level Algebra or an equivalent course with at least a grade of "C"; 5) Possess an up to date New Jersey Diagnostic Radiologic Technologist license or current registration by the American Registry of Radiologic Technologists. Applicants are required to submit a notarized copy of current registry or licensure.

Is an interview required?

In general, you will be interviewed prior to acceptance into this program. The Program Coordinator will generally conduct in-person or phone interviews before admission.

What is the application deadline?

The application and all supporting documents must be received by July 15th for the fall term, December 15th for the Spring term and May 1st for the summer term. Supporting documents include a notarized copy of your health professional credential as well as official transcripts from all institutions you have earned credits.

What are the other requirements?

Since SHRP offers Web courses, you are required to be computer literate upon enrollment in the program. You must also have remote (off-campus) access to Internet services, to include at least web browsing capability and e-mail. To obtain the most up-to-date hardware and software requirements go to the SHRP web site:

<http://shrp.umdnj.edu/online/contact/index.htm> and click on technical requirements.

What is the admission selection process?

Selection is a competitive process that is the responsibility of the faculty. Decisions are based on a composite of the applicant's overall academic ability, including aptitude and abilities in professional and science courses; both oral and written self-expression; personal characteristics such as leadership potential; and life and work experiences including Internet experience. The school does not discriminate against qualified individuals on the basis of race, creed, national origin or disability. The University recognizes the value of diversity and is committed to providing appropriate support to its student body. The Disability Compliance Coordinator may be reached at 973-972-8512.

Where do I register?

Students register for all SHRP courses through SHRP.

Who will advise me during the program?

An advisor will be assigned to you upon acceptance. You are required to schedule an appointment before each semester and are encouraged to have ongoing communication with your advisor.

Can I take course work full-time or part-time?

In general, this program is designed for individuals working within their health care discipline pursuing the certificate and advanced level certification. The program is designed to be on a part-time basis. You have two years to complete the program.

Diagnostic Imaging Technologies

What degree will I receive from this program?

You will receive a certificate in Diagnostic Imaging Technologies.

How many credits will I need to graduate?

You will need a minimum of 33 credits to graduate from the program. The total of 33 credits includes: an Interdisciplinary Health Sciences Core of 6 credits, and an Advanced Imaging Concentration of 27 credits.

What is the typical coursework?

You are required to take the following Interdisciplinary Health Sciences core and Advanced Imaging Science core courses.

Core Courses (6 Credits)

- Health Care Organization
- Legal and Ethical Issues in Health Care

Concentration Courses

- Advanced Patient Care
- Multiple Modality Anatomy
- Computerized Imaging

Select two of the following three sequences:

Sequence 1

- Mammographic Procedures
- Mammographic Practicum
- Quality Management in Medical Imaging

Sequence 2

- CT Protocols & Procedures
- CT Physics & Imaging Equipment
- CT Practicum

Sequence 3

- MR Physics & Imaging Equipment
- MR Protocols & Procedures
- MR Practicum



The School of Health Related Professions was established as a formal institution of the University in 1976. This school has been successful in creating a consistent framework for allied health and nursing education statewide.

Course Descriptions

DXIT 3115 Multiple Modality Anatomy Credits 3

A comprehensive study of the anatomy of the human body as viewed in sagittal, transverse and coronal planes. Emphasis is placed on the interpretation and correlation of the anatomical features demonstrated by Conventional Radiography, Computed Tomography, Interventional Radiography, and Magnetic Resonance Imaging.
(Lecture hours 45)

DXIT 3120 Computerized Imaging Credits 3

An overview of the terminology and methods of data acquisition and image processing that are applicable to the use of computers in the imaging sciences. The organization of computers, the input and output of data, and the principles of image function, display and storage are presented.
(Lecture hours 30; Computer Laboratory hours 30)

HSTC 3130 Mammographic Procedures Credits 3

This course is designed to provide radiographers with or without prior experience in Mammography with the necessary knowledge of Mammography Equipment, Technical Applications, Positioning Techniques, Interventional Procedures, Fundamentals of Image Quality, Quality Assurance/Quality Control, Breast Anatomy and Physiology.
(Lecture hours 45)
Prerequisites: DXIT 4100

DXIT 3139 Mammography Practicum Credits 3

This course integrates laboratory and clinical activities with classroom experience to provide radiographers with or without prior experience in Mammography with the necessary hands on knowledge of Mammography Positioning, Technique, Quality Control, and other functions of the Mammography Department.
(Clinical hours 135)
Prerequisites: DXIT 4100, DXIT 3115

This course is designed to provide technologist with the necessary knowledge to implement and document quality management programs in the general diagnostic imaging department and in the specialty areas. The impact of government regulations and JCAHO accreditation on quality management are presented.

(Lecture hours 45)

An exploration of the patient care skills needed to meet the challenges of the expanding scope of practice, and the professional expectations of the imaging sciences. This course concentrates on areas of increased responsibility for the technologist such as: intravenous therapy, pharmacology, EKG, medical ethics and the legal aspects of present day radiologic science. Students in the Department of Health Science Technologies who have not had any previous allied health training, will be required to complete a 15 hour workshop to include the following material: Vital signs, Body mechanics, and Aseptic technique.

(Lecture hours 45)

A study of the physical principles that govern the operation of Computed Tomography equipment. The construction and function of CT apparatus, including accessory devices such as automatic injectors, are examined. This course focuses on the general aspects of instrumentation, radiation exposure and protection, and their relationship to the quality of the image.

(Lecture hours 45)

Prerequisites: DXIT 4100 and DXIT 3120 and DXIT 3115

An in-depth exploration of the positioning, scanning, and filming methods used to produce quality Computed Tomography images. Includes the methods used to display, film, and archive CT images. Emphasis is placed on the selection of scan parameters, and their relevance to image quality and radiation exposure.

(Lecture hours 45)

Prerequisites: DXIT 4100 and DXIT 3120 or DXIT 3115

HSTC 4229

CT Practicum

Credits 3

This course integrates laboratory and clinical activities with classroom experience to provide practice in Computed Tomography imaging procedures. Students observe and assist CT technologist in the clinical setting, and evaluate the quality of CT images.

(Clinical hours 135)

Prerequisites: DXIT 4100, DXIT 3120, DXIT 3115, DXIT 4210, DXIT 4200

DXIT 4230

MR Physics and Imaging Equipment

Credits 3

A study of the physical principles that govern the operation of Magnetic Resonance equipment. The construction and function of MRI apparatus, including accessory devices are examined. This course focuses on the general aspects of MRI equipment, instrumentation, and safety, and their relationship to the quality of the image.

(Lecture hours 45)

Prerequisites: DXIT 4100, and DXIT 3120 or DXIT 3115

DXIT 424

MR Protocols and Procedures

Credits 3

An in-depth exploration of the positioning, scanning, and filming methods used to produce quality Magnetic Resonance images. Includes the methods used to display film and archive MRI images. Emphasis is placed on the selection of scan parameters, and their relevance to image quality and safety.

(Lecture hours 45)

Prerequisites: DXIT 4100, DXIT 4230, DXIT 3120 and HSTC 3115

DXIT 4259

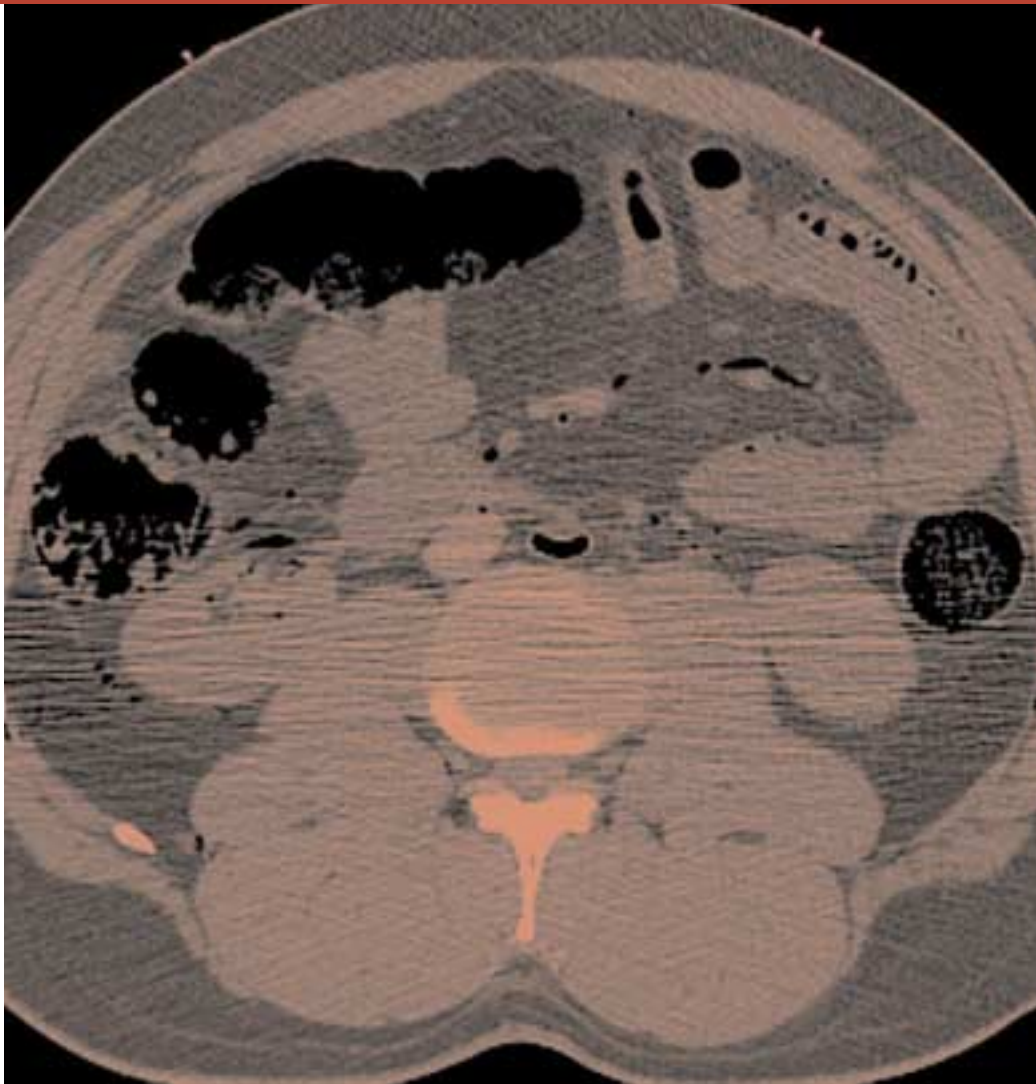
MRI Practicum

Credits 3

This course integrates laboratory and clinical activities with classroom experience to provide practice in Magnetic Resonance Imaging procedures. Students observe and assist MRI technologist in the clinical setting and evaluate the quality of the MRI images.

(Clinical hours 135)

Prerequisites: DXIT 4100, DXIT 3120, DXIT 3115, DXIT 4240, DXIT 4230



What is the practicum requirement?

The practicum is a flexible three-credit, 135 hours of clinical experience. It is designed to provide clinical experiences in Mammography, CT and or MR. The clinical coordinator in conjunction with the student will design the clinical rotation schedule. The clinical coordinator will oversee the student's clinical practicum. In order to successfully complete the clinical requirement students must demonstrate competency in the selected imaging modalities.

Where does the practicum take place?

You may select University Hospital or you may choose your own site. If you choose your own site, you must advise the program director six months before beginning the practicum. Arrangements will be made to orient the preceptor (the on-site supervisor of the practicum), process an official agreement with the site, and provide needed materials.

Special Opportunities For Students

What if I want to enroll in the Bachelors of Science in Health Sciences, Imaging Track at SHRP when I graduate from the Diagnostic Imaging Technology Program?

If you earned a 2.5 grade point average or better in the SHRP Diagnostic Imaging Technology Program, you may apply to the program. The 33 credits earned in the Diagnostic Imaging Technology Program will transfer into the Bachelors of Health Sciences, Imaging track.

Can I start the program if I have not been accepted for admission?

You can take up to 12 credits of course work at SHRP as a non-matriculated student. This does not guarantee admission into the program. To inquire about non-matriculated status, please call the Center for Advanced and Continuing Education (CACE) at 908-889-2560 or check the web site at <http://www.umdnj.edu/ccweb/>.

Tuition/Financial Aid

How much will I pay for tuition and fees?

For current UMDNJ tuition and fees, go to <http://shrp.umdnj.edu/admissions/> and click on Financial and Tuition and Fees. You are required to have health insurance or prove that you have comparable insurance. For information about health insurance, go to <http://shrp.umdnj.edu/admissions/> and click on Health Policy.

Are there other additional fees for the program?

Additional fees would be for books, lab coats, supplies, Internet access, and commencement. Food and housing costs vary depending on accommodations. UMDNJ does not provide housing.

Where do I pay tuition?

Students pay tuition to UMDNJ.

Is financial aid available?

Yes. For students paying UMDNJ, contact the Financial Aid Office at (973) 972-4376 or visit their web site at

<http://www3.umdj.edu/faidweb/index.htm>. Scholarship assistance may also be available through the ADA. The web site is <http://www.eatright.org/students/scholarships.html>

Mission and Program Philosophy Statements

What is the mission of UMDNJ?

The University's mission is to promote professional standards of excellence among students and health care professional by meeting the health needs of New Jersey citizens through the coordination of education, research and community service.

What is the philosophy of the Diagnostic Imaging Technology Program?

The shared goals of this program are to advance and broaden the skills of health related professionals who are prepared at the associate degree/certificate level. The program offers advanced level interdisciplinary courses, and a practicum designed to meet the diverse, flexible and professional needs of practicing health care professionals. The program offers students courses in a variety of traditional learning settings as well as distance education formats. Students are prepared to advance within their allied health profession, as well as work collaboratively with other health care professionals to promote health and help address many of the health problems of today.

To Learn More

To learn more about the Advanced Imaging Sciences Program, contact the Clinical Coordinator, Norman McLeod at 973-972-6504 or by e-mail at mcleoduh@umdj.edu or Gladys Montane at 973-972-8528 or by e-mail at montangm@umdj.edu

You may also want to visit our web site at <http://shrp.umdj.edu> and click on catalog and undergraduate programs.

