Hello and welcome to the online information session for the Magnetic Resonance Imaging Program at Austin Community College. My name is Teresa Garza and together with Lisa Ford, we created the MRI program to meet the need for qualified professionals in the Central Texas area. This presentation will cover basic information about Magnetic Resonance Imaging, the role of the technologist in the health care team, program application, admission processes, and resources for applicants and Health Science students. We are pleased that you are interested in a career as an MRI technologist.
This is a list of the current MRI faculty members.

- Rudy Garza R.T.(R), Department Chair
- Lisa Ford R.T. (R)/(CT)/(MR)
- Teresa Garza R.T.(R)(MR)
The first goal of this information session is to give you a brief overview of the roles and responsibilities that you should expect as you enter imaging sciences as a MRI technologist. I will go over the requirements and documentation that are necessary for admission to the MRI Program. At the end of this information session you should be prepared to submit all of the documents necessary for program admission.
Detailed information on topics covered in this presentation can be found by clicking on the links at the left of the slides. If you have questions at any time during the information session, press the pause button at the bottom of the slide and write down your question. Contact information for Health Sciences and the Medical Imaging- MRI program is found at the end of the information session.
Medical Imaging is the branch of medicine which uses different imaging modalities to assist in the diagnosis and treatment of disease.

A MRI Technologist is a professional who, under the supervision of a physician (usually a radiologist), operates MRI equipment and obtains the images needed for the diagnosis to be made.

A radiologist is a physician who has earned an MD and then completes a four year residency in diagnostic radiology. Radiologists “read” or interpret images and diagnose pathology on the images.
Magnetic resonance imaging, also referred to as MRI or MR, is a state of the art modality that uses a strong magnetic field and advanced computers to acquire images. MRI does not use any radiation, although the strong magnetic field creates a need for knowledgeable technologists to create a safe environment for staff and patients.

The MRI technologist is responsible for completing a safety screening form and obtaining medical history for all those entering the MRI environment. Good communication is essential to explain the procedure with the patient.

MRI exams normally take twenty minutes to one hour of scan time depending on the body region and site scanner.

The MRI machine creates a variety of loud noises; therefore the patient needs to be given ear protection, ie: earplug or headphones. The body region will be placed near or surrounded by a coil. Coils are used to receive the signal that is emitted from the body. The signal is then processed using advanced computers to create the MRI image.

MRI images are highly detailed, so knowledge of anatomy is essential. The technologist will manipulate imaging parameters on the console to obtain optimum images. The technologist will also post process images as needed by the radiologist for interpretation.

MRI is an important part of the medical imaging department. MRI technology allows us to acquire unsurpassed images of the human body which aids in an accurate and reliable diagnosis.
An important part of the technologist’s role is to prepare the patient for the requested examination by explaining the procedure, removing jewelry and other articles which may otherwise compromise the safety of the patient or integrity of the magnet.

The technologist also positions the patient in order to obtain the best images possible.

An important part of the procedure is for the technologist to complete a patient safety screening form and obtain the patient’s medical history information.

The imaging parameters of the MRI machine are also set by the technologist so that the images will have excellent diagnostic quality. When the images are obtained, the technologist will then process the images as needed and prepare them for interpretation by the Radiologist.

The Role of the MRI Technologist

- Prepare Patient
- Complete MRI safety screening form with patient
- Obtain patient medical history
- Explain Procedure
- Remove jewelry and other articles
- Position Patient
- Select optimum imaging parameters on machine
- Evaluate image quality
- Process images as needed for radiologist interpretation
The MRI program is a fourteen (14) credit hour program. The program is a two semester program beginning in the fall. Classes are held on Tuesday and Thursday evenings with clinical rotations on Monday, Wednesday, and Friday during the day.

There are a total of 720 clinical hours that students train at a variety of clinical education settings. This includes hospitals and private medical imaging clinics. The program has clinical sites which include out of town sites in Killeen, Georgetown, and San Marcos. Most of the clinical education sites are in the Austin metro area.

Students should have reliable transportation because you can be assigned to any clinical site. We can only accept the number of students that can be safely accommodated at the clinical sites that are available to us. The clinical coordinator places students at clinical sites based on the types of procedures being taught.

Upon completion of the ACC MRI Program, the student will be prepared to take the national certification exam. The program does not have a job placement service. However, possible employers are observing your work during your clinical rotations.
ARRT is the world’s largest credentialing organization that seeks to ensure high quality patient care in medical imaging. ARRT tests and certifies technologists and administers continuing education and ethics requirements for their annual registration. If eligible, a student in the program may apply at any time to sit and write the ARRT Credentialing exam. The student can take the examination at a designated computer center in many cities across the U.S.
If you have any of the following four histories, it may disqualify you from consideration for a clinical rotation: 1. registered sex offenders 2. Health and Human Services- Office of Inspector General list of excluded individuals, U.S. General Services Administration excluded parties list, Employee Misconduct Registry, U.S. Treasury- Office of Foreign Assets Control (OFAC), List of Specially Designated Nationals (SDN), Texas Health and Human Services Commission, excluded providers in Medicaid and title XX provider exclusion data. 3. Felony convictions 4. Felony deferred adjudications involving crimes against persons (physical and sexual abuse)

*If an individual does not meet one or more of the aforementioned standards, she/he may pursue a pre-eligibility application process with her/his licensing/registry body. If the licensing/registry body approves the individual to take the licensing/credentialing exam, the individual may participate in the clinical rotation.
The ARRT has a Pre Eligibility Application Process. This application is available to potential students through the ARRT (www.arrt.org) and should be processed before a student, who is concerned about passing the criminal background check, is considered for admission. It is important that this be done initially to know if the applicant will be eligible to take the ARRT credentialing examination.
Health Science programs establish standards and essential functions to ensure that students have the abilities required to participate and potentially be successful in all aspects of the respective programs. Students are required to perform these critical behaviors and essential functions for the MRI program as indicated.

The following technical standards and essential functions outline reasonable expectations of a student in the MRI program for the performance of common functions. The student must be able to apply the knowledge and skills necessary to function in the classroom, and/or clinical situations while providing the essential competencies of MRI. These requirements apply for the purpose of ensuring that the applicant of the program is aware of program/profession characteristics.
Technical Standards

• Observation:

Ability to participate actively in all demonstrations and clinical experiences in the professional program component and to assess and comprehend the condition of all clients assigned to him/her for examination, diagnosis, and treatment. Such observation and information usually requires functional use of visual, auditory, and somatic sensations.
Example: The visual acuity to discern diagnostic details in a MRI image.

The ability to see and function in a semi-dark setting.

The auditory acuity to hear varied tones and be able to work around loud machinery.
Technical Standards Cont.

- **Communication:**
  Ability to communicate effectively in English using verbal, non-verbal, and written formats with faculty, other students, clients, families and all members of the healthcare team.

- **Example:**
  The ability to communicate proficiently with patients and fellow members of the healthcare team in the English language.

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Technical Standards Cont.

Motor:

Sufficient motor ability to execute the movement and skills required for safe and effective care and emergency treatment.
Technical Standards Cont.

Examples

- Fine motor skills to steadily crop post-processing of MRI Images.
- The ability to lift and move Immobile patients.
- The ability to change relatively heavy MRI table hardware.

**Example:**

*Fine motor skills to steadily crop post-processing of MRI Images*

*The ability to lift and move immobile patients.*

*The ability to change relatively heavy MRI table hardware*
Intellectual:
Ability to collect, interpret and integrate information and make decisions.

Example:
The ability to assess physical and behavioral signs of emergent conditions displayed by clients that indicate the need for immediate medical attention.

The ability to employ innovative methods of accommodating variations in client condition, practitioner requests, and/or equipment limitations.
Behavioral and Social Attributes:
• Possess the emotional health and stability required for full utilization of the student’s intellectual abilities, the exercise of good judgment, the prompt completion of all academic and patient care responsibilities and the development of mature, sensitive, and effective relationships with clients and other members of the health care team.
Possess the ability to tolerate taxing workloads, function effectively under stress, adapt to changing environments, display flexibility, and learn to function in the face of uncertainties in the clinical settings with patients.
Technical Standards Cont.

Possess compassion, integrity, concern for others, and motivation.
Possess the ability to demonstrate professional behaviors and a strong work ethic.

- **Example:**
  The ability to tolerate heavy workloads and stressful conditions.
Qualified applicants with disabilities are encouraged to apply to the program. It is the responsibility of the student to contact the Office of Students with Disabilities if they feel they cannot meet one or more of the technical standards listed.

- However, the ability to perform all clinical competencies necessary for the ARRT registry examination may be limited due to certain health conditions. Health conditions will be evaluated to ensure student safety in a strong magnetic field. Examples: Pacemakers, aneurysm clips, some surgically implanted devices, and motorized wheelchairs are not safe in the MRI environment.
Each ACC campus offers support services for students with documented physical or psychological disabilities. Students with disabilities must request reasonable accommodations through the Office for Students with Disabilities on the campus where they expect to take the majority of their classes. Students are encouraged to do this three weeks before the start of each semester.
It is the policy of the Austin Community College Magnetic Resonance Imaging program to provide reasonable safety to student technologists occupationally exposed to high field strength magnets.

In the event that a student declares pregnancy, after conferring with her physician the pregnant student must make the final decision as to her acceptance or not accepting this minimal risk. MRI does not use radiation, but it is suggested that a pregnant technologist not be in inside the magnet scan room while the scanner is acquiring images. Please refer to the Program Requirement page on the left for further information.

Another area that an applicant should carefully consider is the cost associated with attending the MRI Program. ACC tuition and fees that are charged to all students are found in the ACC Semester Course Schedule; Health Science students will have additional fees for liability insurance. These fees have already been added in with the tuition unless stated otherwise. You can access a cost estimate sheet for the program at the Program Requirement page.

Working while attending the MRI program may be a challenge for some students. It is highly recommended that work schedules be limited, due to the time commitment required for classes, clinicals, study, and preparation. Plan to spend 2-3 hours on preparation for every hour of class.

A sample of the MRI program: M-W-F will be full days in the clinical setting both Fall and Spring semesters. Clinic times will be 7:30am to 3:30pm for hospitals, and 8:00am to 4:00pm for outpatient clinics. In the Fall semester, 2 classes will be taught T and TH evenings beginning at 6:00pm. In the Spring, only one class will be taught on T and TH evenings.
To review detailed program information, click on the “Application Process” link on the left and go to STEP 1. Successful admission to ACC does not mean that you are admitted to the MRI program.

All applicants must:
- Enroll in ACC
- Follow the admissions steps for the MRI Program

Apply to College-Apply online at www.austincc.edu
Application Process

- Collect the required documentation and complete all immunizations before applying for program admission.
- Submit your program application.
- Do not complete criminal background check until notified by the MRI department.

There is a link to the immunizations webpage on Application Process on the left side, Step 2. View the required immunizations for the MRI Program. Applications are NOT accepted without documentation of COMPLETED program immunizations. Some of the required immunizations can take a minimum of 4 months to complete.

Do not forget to print out a copy of the Verification you will complete at the end of the presentation; you must submit a copy of the Verification with your application materials. Do not complete your criminal background check until you have been accepted into the MRI Program and are notified as to which dates you may submit the criminal background check. It is very important that you don’t start your criminal background check prior to the date posted. This would mean submitting/paying for the criminal background check again.
The application is available on the website under Application Packet and/or in the Health Science Admissions/Information Office.

Submit all documentation with the application. Incomplete applications will be returned and will not be considered.

All immunizations must be completed by application deadline.

At the end of this session you will be required to answer a few questions about the admissions process, and you will need to print out the verification page at the end to submit with your application packet.
These services are available at all of the campuses.

Financial Aid Office provides grants, loans, and work study opportunities to students who may otherwise be unable to attend college. There are priority deadlines for financial aid applications. If you miss the deadlines you must be prepared to use your own resources to pay for your initial expense.
If there is anything that you still have questions about or something that I did not cover, please fell free to contact the Health Sciences Admissions and Information Office.