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Advanced Medical Imaging Technology

Student Handbook 2024-2025

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Program Faculty and Staff

Stephanie Hug, MA, CNMT (PET), RDMS

Nuclear Medicine Program Director, Interim AMIT Program Director hugsa@ucmail.uc.edu HSB 155 513-558-7415 (office)

Stephanie Hug is an Assistant Professor - Educator and the Nuclear Medicine Program Director for the University of Cincinnati Advanced Medical Imaging Technology (AMIT) program. She has 18 years of clinical experience focused on the imaging fields of nuclear medicine, PET imaging, and sonography. Stephanie has over a decade of experience in focused clinical instruction and 2 years of experience in didactic education for postsecondary students. Additionally, she has assisted with research involving PET imaging in collaboration with UC Health and UC College of Medicine

TBD

Magnetic Resonance Imaging Program Director HSB 153 513-558-7415 (office)

is an Assistant Professor - Educator and the magnetic resonance imaging. Program Director for the University of Cincinnati Advanced Medical Imaging Technology (AMIT) program.

Benjamin Stenger, MHA, CNMT, RT (N) (MR) (CT), MRSO (MRSC[™]) Nuclear Medicine & MRI Clinical Coordinator, Interim MRI Program Director stengebr@ucmail.uc.edu HSB 156 513-558-3515 (office)

Benjamin is a registered MRI, CT and Nuclear Medicine Technologist with the ARRT. Benjamin graduated the AMIT program with a Bachelor's degree in 2017, and completed his Master's degree in healthcare administration (MHA) from UC in 2019. In 2019, Benjamin successfully completed the MRI Safety Officer's course through the American Board of Magnetic Resonance Safety (ABMRS). Benjamin currently also works as an imaging technologist with the St. Elizabeth Healthcare System.

Elizabeth Gilkey

AMIT Program Coordinator gilkeyeh@ucmail.uc.edu HSB 160 513-558-7415 (office)

Elizabeth joined the AMIT Team as their new program coordinator in early 2023 after being an elementary school teacher for five years. She received her B.A. in early childhood education from the University of Dayton in 2017. She taught fourth and fifth grade at Queen of Peace Elementary School before transitioning to higher education.

AMIT Adjunct Faculty

Whitney Bowen, MEd, CNMT, RT(MR)

Magnetic Resonance Imaging Professor

Whitney Bowen is currently an adjunct professor in the AMIT Program and MRI Technologist at ProScan Imaging. Whitney graduated from the AMIT program in 2010 and went on to complete her Masters of Education at UC in 2017. Previously Whitney was the clinical coordinator for both the MRI and Nuclear Medicine Programs. Students within her classroom and the AMIT Program will see a strong sense of community, be held to high standards of quality, and work collaboratively to grow as a student, individual and healthcare professional.

Jimmy Stringer, PhD Physics

Nuclear Medicine & MRI Physics Professor

Dr. Stringer is a professional medical physicist with UC Health and graduate of the University of Cincinnati. He began his career serving in the United States Military where he learned the foundations of radiation safety and science. Dr. Stringer is an accomplished researcher and holds a patent for products related to radiation dosimetry. He teaches many physics courses within the program with dynamic teaching style and a focus on practical applications for technologists.

Thomas Haller, RT (R) (CT) (MR)

Adjunct Instructor & Applications Architect

Tom has instructed Human Sectional Anatomy for over 2 decades with this program. He brings a wealth of experience in MRI imaging, CT imaging, healthcare informatics, and patient care to the program. He teaches with a focus on applications to imaging modalities encountered by Nuclear Medicine and MRI technologists.

AMIT Program Overview & History

The University of Cincinnati offers a Bachelor of Science degree in Advanced Medical Imaging Technology to meet the evolving demands of the marketplace and to provide maximum flexibility to today's healthcare student. After taking two years of general education courses, Advanced Medical Imaging Technology students enter the professional education curriculum. Students will combine classroom and clinical training to become competent in Magnetic Resonance Imaging and Nuclear Medicine Technology. Upon completion of the professional curriculum, graduates are eligible to sit for national board exams, a necessity in nearly all healthcare fields.

History

The Advanced Medical Imaging Technology (AMIT) Program was originally developed in 1964 as a Nuclear Medicine Technology Program and offered both an associate and baccalaureate degree. The baccalaureate degree in Nuclear Medicine Technology was the first in the nation of its type.

In 1996, the program became a baccalaureate only, Mult credential, diagnostic medical imaging program. While several diagnostic imaging programs offer Mult credentialing as an option for its students, AMIT is the first program that has Mult credentialing as its academic focus.

The first Mult credential students began their professional curriculum in 1999. In 2003, AMIT began to offer a Certificate to provide an avenue for post-baccalaureate students who were unwilling or unable to pursue a second baccalaureate or an advanced degree.

Magnetic Resonance Imaging Overview

Magnetic Resonance Imaging is a medical imaging specialty that utilizes magnetic fields and their properties in the diagnosis of disease and the analysis of human anatomy. Training in Magnetic Resonance Imaging is twelve consecutive months in duration and will be delivered through a combination of classroom lectures, labs, and clinical site placements. Students successfully completing the curriculum and earning a degree will have fulfilled requirements to sit for the nationally administered board examination.

Magnetic Resonance Imaging Program – Mission and Goals

The mission of this program is to produce competent, multi-skilled, Magnetic Resonance Imaging technologists. Graduates of this program will have obtained the level of didactic and clinical training necessary to meet eligibility requirements for national board examinations in Magnetic Resonance Imaging. While passage of these examinations is up to the individual and therefore cannot be guaranteed by the program, it is the program's goal to supply each graduate with the necessary level of training and experience to adequately prepare for these examinations.

Nuclear Medicine Technology Overview

Nuclear Medicine Technology is a medical specialty that utilizes radioactive isotopes in the diagnosis, characterization and treatment of disease. Training in Nuclear Medicine Technology is twelve consecutive months in duration and will be delivered through a combination of classroom lectures, labs, and clinical site placements. Students successfully completing the curriculum will have fulfilled requirements to sit for the nationally administered board examination.

Mission and Goals – Nuclear Medicine Technology

Consistent with the mission of the University, the Nuclear Medicine Technology curriculum is dedicated to serving the professional education and experience-based learning needs of its students whether they are from Ohio, the region, the

nation, or the world. All students who are dedicated to their studies and the betterment of humankind through medical imaging will find this a safe and inclusive environment for advancing their education. It will be the goal of this program to produce competent, multi-skilled imaging technologists. Graduates of this program will have obtained the level of didactic and clinical training necessary to meet eligibility requirements for national board examinations in their chosen modalities. While passage of these examinations is up to the individual and therefore cannot be guaranteed by the program, it is the program's goal to supply each graduate with the necessary level of training and experience to adequately prepare for these examinations.

Program Accreditation Information

<u>Magnetic Resonance Imaging Accreditation</u> Joint Review Committee on Education in Radiologic Technology (JRCERT)

JRCERT Contact Information

Address:	20 N. Wacker Drive, Suite 2850	
	Chicago, IL 60606-3182	
Phone:	(312) 704-5300	
Fax:	(312) 704-5304	
Email:	mail@jrcert.org	

The JRCERT monitors performance measures of programs and makes this information available to the public. Successful completion of a JRCERT-accredited program assures you that you will be provided with the knowledge, skills, and professional values required for career success.

The AMIT MRI program is currently accredited by the JRCERT, the program was most recently reviewed for accreditation renewal in 2020. The program was awarded a five-year accreditation award and is due for review again in March 2025.

→ <u>http://www.jrcert.org/resources/program-effectiveness-data/</u>

For additional JRCERT program requirements, JRCERT standards, and contact information please visit the following webpage:

- → <u>http://www.jrcert.org/programs-faculty/</u>
- → <u>https://www.jrcert.org/wp-content/uploads/2024/06/2021-Magnetic-</u> <u>Resonance-Standards.pdf</u>

Program Accreditation Information

<u>Nuclear Medicine Technology Accreditation</u> Joint Review Committee on Educational Programs in Nuclear Medicine Technology (JRCNMT)

JRCNMT Contact Information

Address:	820 W. Danforth Rd., #B1
	Edmond, OK 73003
Phone:	(405) 285-0546
Fax:	(405) 285-0579
Email:	mail@jrcnmt.org

The JRCNMT evaluates programs using nationally recognized standards, ensuring quality educational programs.

The AMIT Nuclear Medicine program is accredited by the JRCNMT, most recently for accreditation renewal in 2019. The program was awarded a seven-year accreditation award and is due for review again in 2026.

→ <u>http://www.jrcnmt.org/</u>

For additional JRCNMT program requirements & JRCNMT standards please visit the following webpage:

→ <u>http://www.jrcnmt.org/program-resources/standards-manuals/</u>

AMIT Professional Curriculum/Secondary Admission Process

Admission into the Professional Education component of the Advanced Medical Imaging Technology Program is a competitive process and not everyone meeting the minimum criteria for acceptance will be admitted.

We do offer a direct admit pathway, which is awarded to highly qualified candidates during their senior year in high school. Although the limiting factor is usually the availability of clinical sites, program faculty are under no obligation to accept a student into the professional curriculum simply because availabilities exist. The number of clinical sites available from one year to the next is variable. Program officials will not know the number of available sites until summer semester.

Currently, the following four criteria are considered by program officials when selecting applicants: quality of application, group interview, Math & Science GPA, and overall GPA. The program is continuously reviewed and updated. As such, the program reserves the right to alter the selection criteria without warning in response to changing conditions.

1. Quality of application

- a. Preparation
 - i. Civic engagement
 - i. Observation/shadowing/first-hand knowledge of the disciplines
 - ii. Reliable transportation to/from clinical affiliates
- b. Evidence of good character
- c. Written communication
 - i. Strict adherence to formal grammar, spelling, and punctuation is expected.

2. Overall GPA

- a. Breadth and comprehension of academic background
 - i. Transcripts for <u>ALL</u> previous collegiate work are submitted with the application. International student must have their transcripts evaluated for American equivalency through organizations such as

WES or ICD.

- b. Minimum of 3.0 GPA starting in spring 2025
 - i. A minimum overall GPA of 3.0 is required at time of application and must remain above a 3.0 through the summer semester prior to being admitted to the professional curriculum.

3. Math and Science GPA

- a. Comprehension of coursework directly related to professional studies
 - i. All math and science courses taken to meet program requirements are considered.
 - ii. Math and science work completed in more advanced classes are considered if they are being used to meet program requirements.

4. Specific course work will be completed by start of the clinical curriculum

- a. Coursework prerequisites can be found on our website
- b. Student completing coursework internationally must have their transcripts evaluated for American equivalency through organizations such as WES or ICD.
- c.

5. Group interview

- a. Interpersonal interactions
 - i. Generally about 6 10 applicants per group

*Minimum overall GPA of 3.0 is required at time of application and must remain above a 3.0 through the summer semester prior to being admitted to the professional curriculum.

Applications deadlines are established each year by the program but will most likely occur during the first week of January. The first three stages of the application process are usually completed in January and February. Only those students meeting the minimum criteria stated in the application will be invited to the final stage. The final stage will be completed in March with students being notified of the decisions in April. Unanticipated circumstances may extend these dates, and applicants will be notified when/if delays should occur. Communication between applicants and program officials will occur mainly via email, so applicants are urged to include an email address to check regularly on their application.

Direct Admission

A Direct Admissions program is available for UC's Advanced Medical Imaging Technology program that gives students early admission into their clinical years. *Admission to the clinical year is*

competitive. Highly qualified candidates *may* be offered direct admission to the clinical cohort concurrent with first-year acceptance to the university. As long as you maintain the minimum qualifications throughout your education and apply in the year for which you were offered direct admission, you will automatically be given admission to the clinical years.

At the end of your second year in the AMIT program, you will need to meet the following minimum requirements in order to continue onto the clinical years as a direct admit:

- \rightarrow University cumulative GPA of 3.0
- \rightarrow Math/Science GPA of 3.0
- \rightarrow Passed all program-required courses with a grade of "C" or above;
- \rightarrow Passed any AMIT prefix-designated courses with a grade of "C" or above.

If you do not qualify for direct admission, you can still gain entry into the clinical year by participating in a secondary application process during your second year.

Certificate Programs

The College of Allied Health Sciences offers professional certificates in Magnetic Resonance Imaging and Nuclear Medicine Technology. The ideal certificate student will be one who has already earned a bachelor's degree or higher from an accredited institution and wishes to acquire additional skills and knowledge.

In addition to a bachelor's degree, additional prerequisites include one course of pathophysiology, one year of college chemistry, one year of college physics, one year of college mathematics of algebra and higher, and one year of anatomy and physiology. If these courses were not taken as part of the bachelor's degree, they must be obtained before entering the certificate program. The University of Cincinnati will only accept academic credits completed during the past ten years.

Alternate eligibility is offered to health care professionals. These individuals must hold at least an associate degree in a health care profession from an accredited institution and have at least a one-year equivalent of full-time experience in the health care field within their specialty. One course of pathophysiology, one year of college chemistry, one year of college physics, one year of college mathematics (algebra and higher) and a year of anatomy and physiology are required. If these courses were not taken as part of the

degree, they must be obtained before entering the certificate program. These requirements are under constant review and may be changed without notice. Please message the program directly for additional information or a review.

The program is 12 consecutive months in duration. Through a combination of classroom and clinical instruction, students will be taught the specific skills needed for entry-level positions in their chosen modality.

Certificate Curriculum

The Certificate in Advanced Medical Imaging Technology involves 12 consecutive months beginning in the fall semester.

Pre-certificate courses listed here must be completed before entering the certificate curriculum. They may be completed as part of a degree program or separately in addition to a degree program. Students completing coursework internationally must have their transcripts evaluated for American equivalency through organizations such as WES or ICD. Domestic students must have their transcripts evaluated by the Advanced Medical Imaging Technology Program and/or the University of Cincinnati.

Pathophysiology	3 credits
Mathematics: College Algebra and Trigonometry or higher	6 credits
College Physics	10 credits
Chemistry	8 credits
Anatomy & Physiology	8 credits

Overview of Certificate Curriculum

- Human Sectional Anatomy
- AMIT Orientation and Patient Care Techniques
- 12-month curriculum in Magnetic Resonance Imaging or Nuclear Medicine Technology

What you need to know about the certificate program

Students who successfully complete the Certificate Program will receive the training necessary to accept an entry-level position in their chosen specialty and will be eligible for the board examination. However, there are some differences between the Certificate

program and the bachelor's degree program.

The Certificate program is 12 consecutive months in duration (three academic semesters). The bachelor's degree is 24 consecutive months in duration. Certificate students receive training in one imaging modality while bachelor's degree students receive training in two imaging modalities. Certificate students may transfer up to 1 year of certificate credits toward a bachelor's degree in AMIT provided they complete a second year in AMIT as a matriculated bachelor's degree student.

Throughout your time at UC, certificate students may run into difficulties when enrolling into courses. Manual permissions will be needed to enroll. If you have any problems enrolling in courses, you will need to reach out to the program coordinator, Elizabeth Gilkey (gilkeyeh@ucmail.uc.edu).

Finally, the AMIT Certificate programs are not eligible for federal financial aid. It is the responsibility of the individual student to secure tuition money on their own. Students may be sponsored, in some form, by an organization outside the federal financial aid system.

Distance Learning

This program is fully accredited by federal, state and program specific accreditation bodies for distance learning (DL). DL is granted for students on a case-by-case basis. It is generally reserved for students who attend clinicals in the Lexington, KY area or are students originating from the KCTC system (Kentucky Community and Technical College). Students may request DL privileges due to accident or illness. Use in this scenario is at the discretion of the appropriate program director and clinical coordinator.

Academic Coursework

Book requerments will be listed on course syllabi and maintained in Catalyst.

Nuclear Medicine Technology Curriculum

AMIT 4020: Anatomy, Physiology, and Pathology of Nuclear Medicine Technology I

This is the first in a sequence of three courses discussing the anatomy, physiology, and pathology encountered and imaged in nuclear medicine. This course will provide an overview of radiation physics, instrumentation, radiation safety, radiopharmacy and radiation chemistry, as well as an introduction to nuclear medicine procedures. Musculoskeletal imaging will be the first of several body systems detailed in this series.

AMIT 4021: Anatomy, Physiology, and Pathology of Nuclear Medicine Technology II

This is the second in a sequence of three courses discussing the anatomy, physiology, and pathology encountered and imaged in nuclear medicine. This course will discuss imaging of the respiratory, gastrointestinal, and genitourinary systems. Differentiating between normal and abnormal images and selection of imaging techniques based upon clinical questions are areas of emphasis.

AMIT 4022: Anatomy, Physiology, and Pathology of Nuclear Medicine Technology III

This is the third in a sequence of three courses discussing the anatomy, physiology, and pathology encountered and imaged in nuclear medicine. This course will discuss imaging of the endocrine and cerebrovascular systems and will include inflammation imaging, breast imaging, and therapeutic procedures. Differentiating between normal and abnormal images and selection of imaging techniques based upon clinical questions are areas of emphasis.

AMIT 4025: Radiobiology and Radiation Safety

Students will be instructed in the safe handling of radioactive materials and the associated regulatory requirements of state and federal authorities. Students will receive instruction on the effects of radiation exposure of different types and levels on the human body. Such knowledge of the potentially harmful effects of radiation, weighted against the benefits of its medical use, should help establish a proper attitude for the safe handling and use of radioactive materials.

AMIT 4026: Radiopharmacy

This course will be composed of faculty lectures and labs with support from our clinical affiliates. The didactic portion will familiarize students with the principles of radiopharmacy, radiopharmaceutical preparation and quality control, radiation measurement and monitoring, and the therapeutic use of radionuclides in medicine. The laboratory experience will involve the application of didactic topics.

AMIT 4027: Nuclear Cardiology

This course will provide a detailed curriculum in nuclear medicine cardiology. Students will learn the gross anatomy and physiology of the cardiovascular system and the factors that lead to various cardiac changes. This course will emphasize the imaging protocols, radiopharmaceuticals, and pharmacological stress agents needed to obtain high quality cardiac images. Students will learn to differentiate between normal and abnormal images and to identify imaging artifacts.

AMIT 4028: PET/CT and Fusion Imaging

This course will discuss the roles of the PET/CT scanner in diagnostic medical imaging. Course material will begin with PET/CT instrumentation and will evolve into quality control and calibration procedures. Diagnostic PET/CT imaging will be introduced, and an emphasis will be placed on differentiating between normal and abnormal images and being able to identify imaging artifacts.

AMIT4030: Nuclear Medicine Physics and Instrumentation I

This is the first in a sequence of two courses that will discuss the fundamental principles of physics, mathematics, and instrumentation as applied to nuclear medicine. Topics include principles of radiation detection, radiation measuring instruments, atomic and nuclear structure, radioactive decay, interaction of radiation with matter, and the detection and registering of radiation events.

AMIT4031: Nuclear Medicine Physics and Instrumentation II

This is the second in a sequence of two courses that will discuss the fundamental principles of physics, mathematics, and instrumentation as applied to nuclear medicine. Topics include principles of radiation detection, radiation measuring instruments, atomic and nuclear structure, radioactive decay, interaction of radiation with matter, and the detection and registering of radiation events.

AMIT4033: Nuclear Medicine Technology Directed Practice I

This is the first in a sequence of three courses that will stress practical laboratory experience at clinical sites. Nuclear medicine students will perform procedures under the direct supervision of clinical preceptors. Students will be responsible for completing

required clinical hours and nuclear medicine competencies on a variety of scanners as they train in local hospitals and imaging centers.

AMIT4034: Nuclear Medicine Technology Directed Practice II

This is the second in a sequence of three courses that will stress practical laboratory experience at clinical sites. Nuclear medicine students will perform procedures under the direct supervision of clinical preceptors. Students will be responsible for completing required clinical hours and nuclear medicine competencies on a variety of scanners as they train in local hospitals and imaging centers.

AMIT4035: Nuclear Medicine Technology Directed Practice III

This is the third in a sequence of three courses that will stress practical laboratory experience at clinical sites. Nuclear medicine students will perform procedures under the direct supervision of clinical preceptors. Students will be responsible for completing required clinical hours and nuclear medicine competencies on a variety of scanners as they train in local hospitals and imaging centers.

Magnetic Resonance Imaging Technology Curriculum

AMIT 4003: MRI Safety

This course will review key safety aspects essential to Magnetic Resonance Imaging. This course will emphasize different magnetic fields used in MR scanning and key safety aspects of each, different types of MR scanners and field strengths, key safety aspects in MRI, risks, hazards and dangers related to the MRI environment, including pregnancy, use and risk of contrast agents, acoustic noise, as well as all possible risks associated with MRI examinations.

AMIT 4004: Diagnostic Magnetic Resonance Imaging I

This is the first in a sequence of three courses discussing the diagnostic uses of Magnetic Resonance Imaging. This course will emphasize the human central nervous system (brain and spine) anatomy as seen in multiple orthogonal planes. Distinctions between normal and abnormal with respect to anatomy and physiology will be determined.

AMIT 4005: Diagnostic Magnetic Resonance Imaging II

This is the second in a sequence of three courses discussing the diagnostic uses of Magnetic Resonance Imaging. This course will emphasize the human musculoskeletal system (upper and lower extremities) and the soft tissue of the neck as seen in multiple orthogonal planes. Distinctions between normal and abnormal with respect to anatomy and physiology will be determined.

AMIT 4006: Diagnostic Magnetic Resonance Imaging III

This is the third in a sequence of three courses discussing the diagnostic uses of Magnetic Resonance Imaging. This course will emphasize the human thorax, heart, abdomen and pelvic anatomy as seen in multiple orthogonal planes. Distinctions between normal and abnormal with respect to anatomy and physiology will be determined.

AMIT 4007: MRI Physics and Instrumentation I

This course is the first in a sequence of three courses on Magnetic Resonance Imaging Physics and Instrumentation. This course will study the physical principles, instrumentation and concepts of MRI, including the study of MRI safety, patient screening and patient care issues associated with the function of the scanner.

AMIT 4008: MRI Physics and Instrumentation II

This course is the second in a sequence of three courses on Magnetic Resonance Imaging Physics and Instrumentation. This course will study T1 recovery and T2 decay, T1, T2 and proton density, image contrast, basic concepts of pulse sequences, encoding, k-space, data collection, Fourier Transform, signal-to-noise, contrast-to-noise, spatial resolution, and spin echo formation and pulse sequences.

AMIT 4009: MRI Physics and Instrumentation III

This course is the third in a sequence of three courses on Magnetic Resonance Imaging Physics and Instrumentation. This course will study gradients, gradient echo formation and pulse sequences, flow phenomena, time-of-flight, gradient moment nulling, image artifacts, MRA, diffusion, perfusion, functional MRI, MR Spectroscopy, and the mechanism, safety, and application of MR contrast agents and relaxivity.

AMIT 4011: Magnetic Resonance Imaging Directed Practice I

This is the first in a sequence of three courses that will stress practical laboratory experience at clinical sites. MRI students will perform MRI examinations under the direct supervision of clinical preceptors. Students will be responsible for completing required clinical hours and MRI competencies on a variety of scanners as they train in local hospitals and imaging centers.

AMIT 4012: Magnetic Resonance Imaging Directed Practice II

This is the second in a sequence of three courses that will stress practical laboratory experience at clinical sites. MRI students will perform MRI examinations under the direct supervision of clinical preceptors. Students will be responsible for completing required clinical hours and MRI competencies on a variety of scanners as they train in local hospitals and imaging centers.

AMIT 4013: Magnetic Resonance Imaging Directed Practice III

This is the third in a sequence of three courses that will stress practical laboratory experience at clinical sites. MRI students will perform MRI examinations under the direct supervision of clinical preceptors. Students will be responsible for completing required clinical hours and MRI competencies on a variety of scanners as they train in local hospitals and imaging centers.

1st Year Students (Bachelor's degree & certificate students)

AMIT 2098: Ethical and Legal Issues in Medical Imaging

Medical imaging students enrolled in this course will explore the theoretical and practical aspects of medical ethics and law in the area of healthcare education and practice. This is an applied ethics course specific to the field of medical imaging. Through this course, students will integrate general content knowledge on value development and ethical frameworks and theoretical application through classroom-based problem based-learning (PBL) activities. Through peer collaboration and PBL activities, students will then use ethical theoretical frameworks to develop a potential solution to an identified challenge and write a proposal to remedy the area of improvement they observed in the community. At the end of this course, students will have an enhanced ability to critically think about ethical decision-making in patient care, as well as experience in identifying and developing ethical solutions in their community.

AMIT 3015: Human Sectional Anatomy

This course is a survey of the human anatomy in all sectional planes. Medical images from CT, MRI, PET, and SPECT may be used to supplement the textbook. Students will be expected to use proper anatomical nomenclature with respect to body structures. This course will emphasize differentiating between normal and abnormal anatomical structures.

AMIT 3020: AMIT Orientation and Patient Care Techniques

This is an introductory course for AMIT students who are entering the professional curriculum. Students will be introduced to workplace ethics, venipuncture, blood pressure monitoring, infection control, ECG monitoring, and proper body mechanics. This course is required for all students entering the AMIT professional curriculum.

AMIT 3021: Medical Imaging Informatics

This is an <u>elective</u> course designed for AMIT students enrolled in the professional curriculum. This course will build off clinical and didactic course work to focus on computer and network systems needed in medical imaging. Topics include network fundamentals, workflow, user interface, safety and security, Picture Archival and Communication Systems (PACS), and electronic medical record (EMR) systems. This course is given in the summer, fully online. It provides a pathway for students to maintain full time enrollment in addition to expanded knowledge of healthcare informatics.

2nd Year Students (Bachelor's degree students only)

AMIT 4090: Medical Imaging Research Methods

This is the first course in a sequence of three courses housing the senior capstone experience. During this first course, students are introduced to qualitative and quantitative research methods, basic statistical analysis and interpretation, and institutional research policies.

AMIT 4091: AMIT Capstone

This is the second course in a sequence of three courses. This course is the primary AMIT Senior Capstone experience. Students will explore the intricacies of institutional review boards and encounter the style manuals of different publishers in the medical imaging community. Students will develop their literature review into a presentation that will be given at the College's annual PRaISE Conference.

AMIT 4092: Medical Imaging Review

This is the third course in a sequence of three courses housing the senior capstone experience. This course will emphasize professional service to the medical imaging community. Students will prepare their literature review according to the style manuals of selected peer-reviewed journals. Students will be guided through professional service opportunities for new graduates. They will begin their professional service by writing a series of board examination questions suitable for their respective modalities. Students will be asked to prepare resumes and will be counseled on job search methods.

Miscellaneous

AMIT 5000: Advanced Medical Imaging Technology Practicum

This course is an elective learning experience for students engaged with underserved communities. International service is preferred but domestic opportunities are a consideration for students unable to travel abroad. During their engagement, students will learn and reflect upon local customs, medical issues, economic issues, and government.

HLTH 3100: Mid-Collegiate Touch Point Conference

This course is underpinned by a theoretical framework which draws heavily from scholars whose work emphasizes social justice, equity, and anti-oppression. This course will enable students to better understand healthcare systems around the world and healthcare/public health dilemmas. The focus of this course is on healthcare systems, policies, legislation, the politico-economics, and socio-cultural aspects of healthcare, and the role of everyday citizens in advocating for the health and well-being of society. Students will engage with the readings and course content through reflective writing, debate, and collaborative projects.

*Courses are evaluated throughout the year and changes may take place in the curriculum. AMIT program faculty reserve the right to make the curricular changes they deem necessary.

Clinical Affiliates

Nuclear Medicine Clinical Affiliations

JRCNMT Approved Clinical Sites	Address	Website
Baptist Health Lexington	1740 Nicholasville Rd, Lexington, KY 40503	https://www.baptisthealth.com/lexington/
Bethesda North Hospital	10500 Montgomery Road, Cincinnati, OH 45242	http://www.trihealth.com/hospitals-and- practices/bethesda-north-hospital/
Children's Hospital Medical Center	3333 Burnet Avenue, Cincinnati, OH 45229	http://www.cincinnatichildrens.org/
The Christ Hospital	630 Eaton Avenue, Hamilton, OH 45013	http://www.thechristhospital.com/
Good Samaritan Hospital	375 Dixmyth Avenue, Cincinnati, OH 45220	http://www.trihealth.com/hospitals-and- practices/good-samaritan-hospital/
Kettering Health Hamilton (Fort Hamilton Hospital)	630 Eaton Avenue, Hamilton, OH 45013	http://www.ketteringhealth.org/forthamilton/
Mercy Health Partners (Anderson, Clermont, Fairfield)	Mercy Health Anderson 7500 State Road, Cincinnati, OH 45255 Mercy Health Clermont 3000 Hospital Road, Batavia, OH 45103	https://www.mercy.com/locations/hospitals/cincinnati

	Mercy Health	
	Fairfield	
	3000 Mack Road,	
	OH 45014	
St. Elizabeth	St. Elizabeth	http://www.stelizabeth.com/
		Intp.//www.stell2abeth.com/
Medical Center	Dearborn	
(Dearborn,	600 Wilson Creek	
Edgewood,	Road,	
Florence, Fort	Lawrenceburg, IN	
Thomas)	47025	
	St Elizabeth	
	Edgewood	
	1 Medical Village	
	Drive, Edgewood,	
	KY 41017	
	.	
	St Elizabeth	
	Florence	
	4900 Houston	
	Road, Florence, KY	
	41042	
	St Elizabeth Ft	
Thomas- 85 North		
	Grand Avenue, Ft	
	Thomas, KY 41075	
University of	234 Goodman	http://universityhospital.uchealth.com/
Cincinnati	Street, Cincinnati,	
Medical Center	OH 45219	
UC Health West	7700 University	http://uchealth.com/westchesterhospital/
Chester	Drive, West	
	Chester, OH 45069	
UC Radiation	170 Panzeca Way,	https://research.uc.edu/support/offices/radsafety
Safety	Cincinnati, OH	
	45267	
University of	1000 S. Limestone	https://ukhealthcare.uky.edu/
Kentucky	University of	
Albert B.	Kentucky	
Chandler	Lexington, KY	
Hospital	40536	

MRI Clinical Affiliations

JRCERT Approved Clinical Sites	Address	Website
Cincinnati Children's Hospital Medical Center	3333 Burnet Avenue, Cincinnati, OH 45229	http://www.cincinnatichildrens.org/
Cincinnati Children's Hospital Medical Center – Liberty Campus	7777 Yankee Road, Liberty Township, OH 45044	http://www.cincinnatichildrens.org/
The Christ Hospital	2139 Auburn Avenue, Cincinnati, OH 45219	http://www.thechristhospital.com/
Fort Hamilton Hospital	630 Eaton Avenue, Hamilton, OH 45013	http://www.ketteringhealth.org/forthamilton/
Good Samaritan Outpatient Center Glenway	6350 Glenway Avenue, Cincinnati, OH 45211	https://www.trihealth.com/hospitals-and- practices/good-samaritan-outpatient-center-glenway/
<u>Good</u> Samaritan Western Ridge	6949 Good Samaritan Drive, Cincinnati, OH 45247	https://www.trihealth.com/hospitals-and- practices/good-samaritan-western-ridge/
Mercy Health Partners (Anderson, Clermont, Fairfield)	Anderson 7500 State Road, Cincinnati, OH 45255	https://www.mercy.com/locations/hospitals/cincinnati

	Clermont 3000 Hospital Road, Batavia, OH 45103 Fairfield 3000 Mack Road, OH 45014	
<u>Mercy</u> <u>Health - The</u> Jewish Hospital	4777 East Galbraith Road, Cincinnati, OH 45236	https://www.mercy.com/locations/hospitals/cincinnati
Pro Scan Imaging (Eastgate, Mason, Midtown, Paul Brown Stadium, Tri- County, Troy, Tylersville, Westside)	Proscan Eastgate- 4440 Glen Este- Withamsville Road, Cincinnati, OH 45245 Proscan Mason- 4900 Parkway Drive, Cincinnati, OH 45040 Proscan Paul Brown Stadium- 6 Paul Brown Stadium, Cincinnati, OH 45202 Proscan Tri County- 12124 Sheraton Lane, Cincinnati, OH 45246 Proscan Tylersville- 7307 Tylers Corner Drive, West Chester, OH 45069	https://proscan.com/physician-resources/imaging- centers/

	Proscan Troy - 45 South Stanfield Road, Troy, OH 45373 Proscan Westside - 6125 Harrison Avenue, Suite A, Cincinnati, OH 45247	
St. Elizabeth Medical Center (Dearborn, Edgewood, Florence, Fort Thomas)	St. Elizabeth Dearborn 600 Wilson Creek Road, Lawrenceburg, IN 47025 St Elizabeth Edgewood 1 Medical Village Drive, Edgewood, KY 41017	http://www.stelizabeth.com/
	St Elizabeth Florence 4900 Houston Road, Florence, KY 41042 St Elizabeth Ft Thomas 85 North Grand Avenue, Ft Thomas, KY 41075	
Tri-Health Beechmont Anderson	7777 Beechmont Avenue, Cincinnati, OH 45255	https://www.trihealth.com/hospitals-and- practices/trihealth-beechmont-anderson/

Tri-Health Bethesda Arrow Springs Tri-Health Bethesda North Hospital	100 Arrow Springs Blvd., Lebanon, OH 45036 10500 Montgomery Road, Cincinnati, OH 45242	http://www.trihealth.com/hospitals-and- practices/bethesda-arrow-springs/ http://www.trihealth.com/hospitals-and- practices/bethesda-north-hospital/
Tri-Health - Good Samaritan Hospital	375 Dixmyth Avenue, Cincinnati, OH 45220	http://www.trihealth.com/hospitals-and- practices/good-samaritan-hospital/
<u>Tri-Health-</u> <u>Kenwood</u>	8240 Northcreek Drive, Cincinnati, OH 45236	https://www.trihealth.com/hospitals-and- practices/trihealth-kenwood/
<u>University of</u> <u>Cincinnati</u> <u>Medical</u> <u>Center</u>	234 Goodman Street, Cincinnati, OH 45219	http://universityhospital.uchealth.com/
<u>UC Health</u> <u>West</u> <u>Chester</u>	7700 University Drive, West Chester, OH 45069	http://uchealth.com/westchesterhospital/

*This is a listing of the current clinical affiliates of the Advanced Medical Imaging Technology Program. Students will not rotate to every clinical site. The amount of time spent at each rotation may vary between individual sites. Site start times may vary between individual sites. Not all modalities go to every clinical site.

AMIT Program Policies

Professional Behavior

Professional Conduct is expected and required at all times in the AMIT program. Unprofessional conduct includes, but is not limited to: the use of profane, vulgar or rude language in the classroom, teaching laboratory, discussion boards, office hours, telephone conversations and/or in emails; disrespectful behavior or inappropriate comments of any type aimed toward other students, program faculty/staff or clinical site employees; cheating and/or dishonesty; unethical behavior; unsafe practices during clinical experiences; and/or violation of Program, College, or University policies.

Clinical affiliates may impose specific rules for their site. Students are expected to follow <u>all</u> clinical guidelines at their site. Violation of clinical specific rules may result in disciplinary action, including dismissal from the AMIT program. Clinical affiliates including preceptors and management are in contact with program staff in any matter relating to student behavior in the clinical context.

Citing unprofessional conduct is at the discretion of the course faculty (including the clinical coordinator) and/or the Program Director. Unprofessional conduct will result in a conference between the student involved, the course instructor, program director, and in the case of clinical behavior issues, the clinical coordinator. Repeated incidences of unprofessional conduct will result in disciplinary action. Repeated incidences of unprofessional conduct may result in dismissal from the program.

Attendance and Participation Policy

Students are expected to actively participate in all courses in person and in the Canvas learning environment. Students will also complete all assignments in a by their established due dates. Infrequent and inconsistent participation and work completion will reduce the benefits obtained from the course and lead to a lower grade.

The AMIT program is committed to the success of all students enrolled in the program. Any situation that may prevent a student from regular participation in course activities should be communicated to the course instructor during the first week of the course. Students

requesting accommodation for medical reasons should register with the Office of Accessibility Resources (https://www.uc.edu/campus-life/accessibility- resources.html).

Absence Policy – Vacation or Personal Time

We highly discourage students from taking vacations or personal leave during regularly scheduled class/clinical days during the professional curriculum component of this program. The university offers very generous breaks and holidays with the expectation you will use these times for non-emergency doctor appointments, vacation or personal business. You are also afforded generous time for illness/emergency or religious observation. This is an intense program where students are not able to grade replace or repeat courses. You must successfully complete each course with a C or better, in sequence to maintain your placement, thus, each day of class and clinical is crucial to your progression and ultimate success.

We consider any absence over your allotted personal time to be extended. Students may request extra time off but this must be done in writing. Students will notify the applicable AMIT program director and/or clinical coordinator. Students will include the purpose of their proposed absence, the exact time period of their absence, and their proposed location during the absence. Program officials will consider requests on a case-by-case basis and grant requests with or without conditions. Program staff will consider many factors before granting requests including grades in all course work, clinical hours accumulated and banked, number and quality of completed clinical competencies and professional conduct. Because student didactic and clinical time is very different, we handle them slightly differently.

Didactic time:

You will be allotted 1 personal day per semester. Even when using this day, all assignments, exams and activities must be completed on time. Additionally, you may not take this day (or any personal time) on the day of an in-person event or exam. You will receive a zero and risk failing your class.

Any time taken above this generous allowance will be considered on a case-bycase basis per program policies above. Students WILL be required to attend class virtually AND participate in all activities during class if leave is granted. Additionally, students must turn in all assignments, exams and activities on time. Students choosing to take a vacation or personal time despite being denied, failing to request time off; or not complying with all provisions of time off approval will face disciplinary action which may include dismissal from the program.

Clinical time:

Students are required to complete a specific number of clinical hours each semester. Students failing to complete the required clinical hours will receive an incomplete for directed practice course and be prevented from course progression or modality completion. If the deficiency in either clinical time and/or clinical competencies is not corrected in the time frame mutually agreed upon with AMIT faculty (Program Director and/or Clinical Coordinator) following the semesters end, the student may risk being held from modality completion, progression and/or face removal from the program. Much of this policy is a provision of accreditation. Thus, we must be very strict on clinical time.

If students choose to take vacation or personal time that jeopardizes completion of the requisite clinical hours, the program cannot guarantee extra clinical placements, days or times. Students falling behind on clinical hours may be dismissed from the program if corrective action is not possible and/or taken.

Students are allotted a generous 16 hours of personal clinical time each semester. Students may use this time but will be <u>responsible for notifying their</u> <u>clinical preceptors and the clinical coordinator when they will use it</u>. Students may also bank additional hours as specified under "Clinical Site Policies, clinical time" section of this document. If additional time is granted to a student, the student will be responsible for notifying their clinical preceptors and ensuring they have banked hours to cover the time. Students will be at risk of dismissal from a clinical site if they fail to communicate with their clinical preceptors. Students choosing to take an extended time off despite being denied, not having a plan for banked hours to do so or failing to request time off will face disciplinary action which may include dismissal from the program.

Leave of Absence Policy for Federally Protected Activities

This category includes documented cases of military duty, jury duty, bereavement, pregnancy, personal illness or care of a dependent. Students needing an extended leave of absence will need to inform the AMIT program director and clinical coordinator <u>in writing</u> if such absence will be more than 2 days. Again, we expect students to schedule appointments and care outside of classroom and clinical hours when appropriate and possible. Didactic course work will likely be allowed through distance learning at the discretion of faculty; however, our accrediting bodies require a specific amount of clinical time to successfully complete professional curricula. All efforts will be made to allow students to make up clinical time but on time program progression and clinical site availability cannot be guaranteed. Students will be allowed to progress once all didactic requirements have been met within a modality, but we cannot allow students to progress to a subsequent modality or complete their current modality (or certificate) until all didactic and clinical requirements are met. For true, documented, covered reasons, the program will make every effort available to it to get students back on track.

Please note that religious activities and/or holidays are covered by a separate policy found elsewhere in this document.

HIPAA Policy

Students are not to discuss personally identifiable patient data with anyone not directly involved with the patient's care. All students must complete HIPAA compliance training for the university AND their assigned clinical sites. This may require students to complete multiple, similar HIPAA training modules. Any student found not complying with HIPPA regulations could result in being removed from their clinical site and/or the AMIT program. HIPAA applies to all classroom assignments and case studies as well as clinical activities. Patient information and images must remain anonymous when being used by students for assignments.

Required trainings

- All students will be required to attend annual Blood Born Pathogens training. This training is provided by the university. Its date and time will be provided to you by department staff during fall semester.
- All students must maintain CPR certification with an accredited organization. This must be reliably documented to clinical affiliates and AMIT staff. Students will be offered training, at their expense through the program. If they choose not to participate in this offering, it will be the onus of the student to get and maintain this certification.
- All nuclear medicine students must attend all radiations safety trainings mandated by the universities radiation safety officer (RSO). All applicable training is coordinated by AMIT faculty and are offered free to students.

Insurance Coverage Policy

All AMIT students must follow the University of Cincinnati requirements and carry personal health insurance.

All AMIT students are covered under the University of Cincinnati's professional insurance policy. Policy information is given to clinical sites upon request and annually. In the event that a student needs a copy of our program professional insurance policy, please see the program clinical coordinator.

Drugs and Alcohol Policy

Tobacco-free campuses – includes all clinical affiliates

Effective May 1, 2017, smoking and tobacco use (including chewing tobacco and electronic cigarettes) shall be prohibited by students, staff, faculty, visitors, vendors, and contractors at all times in or on University of Cincinnati Properties, including events on university property during non-school hours, including but not limited to the following: all facilities owned or leased by the University of Cincinnati as well as the grounds of any property owned or leased by the university. This includes all shelters, indoor and outdoor theaters and athletic facilities, bridges, walkways, sidewalks, residence halls, parking lots, and street parking and garages owned by the university. Please note this also prohibits smoking inside personal vehicles parked on university property as well as any vehicles owned, operated or leased by the University of Cincinnati. Please note that certain local employers may require a potential job candidate to be nicotine free.

Drug Screening

Drug screening is required.

The University of Cincinnati and its clinical partners are all part of the drug free workplace initiative and are drug free. This includes marijuana because it is still federally illegal. Students will be dismissed from this program if found to be manufacturing, distributing, selling, using, offering for sale, possessing, buying or attempting to buy any drug, controlled substance, and/or narcotics in an illegal manner. Additionally, Students will be dismissed from the program if found to be attending class or clinical rotations while under the influence of alcohol, illegal drugs, or narcotics. Legally prescribed drugs are acceptable when used in the manner prescribed by a licensed physician and the effects of the drugs do not impair the students' judgment or physical activities.

The professional curriculum of the Advanced Medical Imaging Technology Program requires you to complete a 12-panel drug screening, at the expense of the student, as a

condition of your acceptance and matriculation into the professional program. Clinical sites have the right to refuse clinical positions to any student refusing or failing any part of a drug screen. If two clinical sites decline a student because of this policy, the student may not be able to complete the clinical experience and may be dismissed from the program. The program and its affiliates will not be able to refund any monies spent by the student should the student fail to satisfactorily complete any drug screening requirements or fail to comply with the policies of the program and clinical affiliates regarding drug screening. Please note that the AMIT faculty reserves the right to request a student undergo a drug screening if use is suspected at the expense of the student. Refusal to comply with a drug screening request will result in disciplinary action which may include dismissal from the program.

You will need to schedule an individual drug screening appointment with UC Health Services. Your drug screening must be completed at UC Health Services, do not go to any other facility to complete this requirement (the screening panel for clinicals is very specific). The cost is \$40 for the full panel drug screening requirement. Also, all results will remain confidential, and I will only be notified if your results prohibit you from beginning clinical rotations.

Lindner Athletic Center (Main Campus) 2751 O'Varsity Way, 3rd Floor Room 335 Cincinnati, Ohio 45221

Security Clearance/Background Check

National and state background checks <u>must be completed yearly</u> for all MRI and Nuclear Medicine students prior to the first clinical experience. Clinical sites reserve the right to decline clinical positions to any student who fails to meet their expectation of conduct. If two sites decline a student, the student may not be able to complete the clinical experience and program. If you are concerned regarding this requirement, please contact the Clinical Coordinator or Program Director to discuss this further.

You will need to schedule an individual background check appointment with UC Public Safety to complete both a state and national background check (you do NOT need a fingerprint card). The cost is \$67.20 for both the BCI (state) and FBI (national) checks. The University's Public Safety office is located at 4 Edwards Center on main campus. To complete the application, you will need to supply your Driver's license, SSN, address and payment. Specifics on dates will be given at orientation each year. Typically, you will fill out the background check application during the first week of September (this will be facilitated by the AMIT staff). We will assist you in properly filling out the document to ensure timely processing. The AMIT program will receive the results of the check and once processed, will be made available to the students for their individual records (a copy).

For UC Public Safety location information and to schedule your appointment visit this website http://www.uc.edu/about/publicsafety/services/background-checks.html

Board Examination Ethics Review

Previous convictions may affect board eligibility – Pre-application ethics reviews should be submitted to appropriate national boards to determine eligibility. If you have a previous conviction or charge on your record it might be necessary to complete the pre-application review before taking your registry exams. We do not want any students to go through the entire year of a modality and then find they are not eligible to take their registry exam. Each registry has a varied review process; please see the links below:

Nuclear Medicine - http://www.nmtcb.org/policies/preappreview.php

MRI – https://www.arrt.org/pages/earn-arrt-credentials/initial-requirements/ethics/ethics-review-preapplication

If you even remotely think there may be difficulties with any components of the ethics review, please set a time to discuss the matter with AMIT faculty as soon as possible.

Didactic Education Policies

Dress code

No specific dress code beyond what the University has established for students will be enforced in the AMIT classroom. Students are urged to dress appropriately for the room temperature. Rooms may run either hot or cold and are beyond the faculty/staff's means to control.

Severe weather

When inclement weather threatens the safety of the University of Cincinnati community, the Senior Vice President for Administration and Finance may invoke University Rule 3361: 10-55-01 and declare an emergency closing or delay. The College of Allied Health Sciences will observe the university emergency closing protocol for all on-campus classes. When this occurs, <u>all in person classes will be moved to virtual offerings</u>. Students will be expected to participate in this way.

Grading

Grades are submitted each semester. Course instructors use their own grading policies and scales, details of which are found in the specific course syllabus. Course instructors will make every attempt to maintain grades in Canvas.

The grades for Directed Practice will be based upon technologists' evaluation of the student's clinical performance, meeting the minimum number of mandatory and elective clinical competencies, meeting the minimum number of mandatory clinical hours, and the completion of case studies. A minimum number of technologist evaluations each semester must be submitted before a final grade can be derived. The number and type of clinical competencies and clinical performances will be established by the individual program directors.

Due to the cumulative nature of AMIT professional courses, any grade of "I" received for any professional curriculum course must be remedied before the end of the following semester. Students with a grade of I at the end of summer semester will not be allowed to sit for board exams until the grade is a C or better. Unresolved grades of "I" will be converted to "F" and the student will be dismissed from the AMIT program. Additionally, students must complete all professional curriculum courses with a C or better. Final grades below a C will result in dismissal from the program.

Should a student feel or notice that an incorrect grade was given, they should consult the faculty member giving the grade immediately. Should it turn out that the grade is incorrect, the instructor will submit a change of grade. However, if a student fails to bring the incorrect grade to the attention of the instructor before the end of the following semester, the grade will NOT be changed regardless of whether it is correct or not.

Clinical Site Policies

Clinical Site Assignments

Students are assigned to clinical sites by the Clinical Coordinator and/or the Directed Practice professor. Each student can expect to go to multiple clinical sites throughout the year in different locations, both near and far. Students are assigned to clinical sites based on several criteria including preference of the clinical affiliate, type of exams offered at the affiliate, trauma designation of the affiliate, and patent population of the affiliate. We do ask students for placement preference however; student learning and class needs outweigh student preference. Any student refusing their assigned clinical site/rotation will be delayed in progression or removed from the program.

Student Clinical Work Policy

Under specific circumstances, as dictated by our accrediting agencies and board exam agencies, The student's workplace may be utilized as a clinical site, but student clinical hours must be distinguished from employee hours. Under no circumstances may students be PAID during their clinical practicum experience, nor may they be paid when performing clinical competencies. This is a requirement of the accrediting bodies and board exam authorities.

Clinical Time

Clinical practicum experiences are scheduled Monday through Friday. Students must maintain the hours established by the clinical coordinator and the clinical practicum site. Some clinical time adjustments may be required occasionally to accommodate specific tasks that are only performed at certain times at the clinical location.

Generally, students should reserve 6:00am – 6:00pm all clinical days. Clinical shifts are traditionally 8 hours within this time frame. Times outside these hours must be approved by written agreement between the student, the clinical site preceptor, and program staff. This is done on a case-by-case basis and should be considered very rare. Students may not attend clinical for more than 10 hours a day and may not exceed 40 hours per week ever. Currently, for both modalities students are not permitted to go to clinical rotations during the weekends.

Students may be sent home early at the discretion of clinical staff. In the event a student is sent home early, they must properly document this with appropriate signatures from clinical staff. If the documentation is verified by the clinical coordinator, the student will receive time for the full clinical shift – 8 hours.

Conferences or other in-person healthcare education may count towards clinical hours. Students may receive 2 clinical hours for each hour of conference time up to 24 hours of clinical time. These extra hours will be referred to as banked hours. These hours may roll over **one** semester **within the same imaging modality**. For example, hours gained in fall semester may be used in spring but not summer; hours gained in summer but not the following fall because students will not be enrolled in the same imaging modality at that time. Students are responsible for providing program officials with appropriate documentation of these activities and hours.

Banked hours may be used to cover time off for illness, approved vacation or other leave. Hours may also be banked during exam week or other time when the university

is open, but students are not otherwise required to attend clinicals. More detailed explanations can be found in your directed practice syllabi. All banked hours, like regular clinical hours must be reported to the clinical coordinator.

Clinical Time and University Holidays and Weather Events

Students may not attend clinical activities when the University is closed for holidays or severe weather.

When inclement weather threatens the safety of the University of Cincinnati community, the Senior Vice President for Administration and Finance may invoke University Rule 3361: 10-55-01 and declare an emergency closing or delay. The College of Allied Health Sciences will observe the university emergency closing protocol for all on-campus classes (online courses will always proceed as normal) When UC is closed due to inclement weather and hazardous road conditions, students are not allowed to go to clinical sites. Students should contact their clinical liaison to inform them of the closure. If the closure occurs while at the clinical site, students should leave when it is safe to do so. Students should use good judgement when making the decision to leave or stay in the event the university closes while at a clinical site.

Documentation of Clinical Education

Students will document all clinical time, evaluations and competencies with the clinical coordinator (CC). Students will refer to their directed practice syllabi and the CC for the number of hours and number of competencies required during any semester. The student shall meet with the CC when needed to review clinical hours or competencies. These meetings may NOT be during class time and will be scheduled with the CC directly. While the program makes every effort to share received documentation with students, it is the student's responsibility to maintain a copy of all records relating to clinical activities.

- Each student will maintain his/her own clinical time sheet. Time sheets are to be completed each day during the year and will be collected weekly.
- Students will be signed in AND out by staff <u>present at the time the student</u> <u>comes in/leaves for the day</u>.
- Each student must use only their time sheet. Students attending the same clinical site rotation may not complete one-time sheet collectively.
- Any deficit in clinical time or competencies must be addressed <u>before the end</u> of the semester. Students failing to address clinical time deficits with the CC in a timely manor will receive an incomplete (I) for the semester and will be at risk of dismissal from the program.
 - \circ $\;$ Students will be allowed to use exam week to make up missed time.

Transportation Policy

All students are required to have reliable transportation to and from their clinical site rotations. Students are responsible for all costs and transportation related to each scheduled clinical practicum rotation, in addition to normal tuition and fees. Shall a student's transportation become unreliable it is the student's responsibility to resolve the issue. The AMIT program cannot guarantee any rotation changes due to transportation issues. If the clinical site is not commutable, students must be prepared for the possibility of distance learning and relocation for this period.

Accident Policy

In the event of an accident at a clinical site facility, please notify the AMIT program clinical coordinator when it is safe to do so. All incidents will be handled individually with the program, the clinical affiliate and the student involved. All information regarding the accident will be kept confidential. All students are required to carry health insurance. In the event of a personal injury students are required to use their health insurance and are responsible for all costs associated with the treatment of their injury.

Needle Stick Policy

In the event of an accidental needle stick, please notify the AMIT program clinical coordinator when it is safe to do so, and as soon as possible. All incidents will be handled on an individual basis with the program, the clinical affiliate and the student involved. All information regarding the accident will be kept confidential. All students are required to carry health insurance. In the event of a personal injury students are required to use their health insurance and are responsible for all costs associated with the treatment of their injury.

Venipuncture policy

Students must abide by all individual clinical site venipuncture policies. Students may practice venipuncture in the AMIT lab provided there is a licensed person and/or facility directly observing. Students may practice venipuncture on people, including other students, provided all parties consent and that the student wishing to perform the stick has successfully completed OSHA Blood Borne Pathogen training. Students will always observe standard precautions and must be directly supervised by an AMIT faculty member or guest clinical facilitator.

Identification

Student identification badges must be worn visibly and face-up during clinical rotations for security reasons. Students are responsible for obtaining these identifications. Some

clinical affiliates may require site specific identification in addition to student ID cards.

Clinical Dress Code Policy

It is important that patients and visitors of our clinical affiliates look upon us as professional and competent in the performance of our duties and in our learning endeavors. A strict dress code is an essential part of the impression we make. Additionally, safety, ergonomics, and ease of movement are necessary when dealing with both patients and equipment. In keeping with these principals, the following dress code has been developed for our students. Should this policy conflict with the dress code set forth at clinical affiliates, the dress code of the clinical affiliate shall prevail. Failure to comply with the dress code will result in students being barred from taking part in clinical rotations.

Please bring any questions or concerns about uniform to AMIT faculty.

Scrubs	Top and bottoms, conservative solid colors. Solid color undershirts are highly recommended	
Laboratory Coats	 NMT: White lab coat – long sleeved, MUST come down to mid- thigh. Must always be worn buttoned while participating in any clinical activity. Lab coats are not to leave clinical sites except for cleaning. MRI: May be mid-thigh or shorter. Long or short sleeved is permitted. Lab Coats are optional for MRI. 	
Shoes	Choose shoes that are comfortable. You will be on your feet a great deal. Higher quality shoes may be well worth the additional expense. The shoe chosen for clinicals must cover the <u>entire foot and heel</u> and be subdued in color. Gym shoes are ideal. These should be worn only for clinical rotations. Traditional Crocs or similar style clogs are not acceptable for any of the modalities unless they are of their professional line and have no openings, a solid heel, and slip resistant soles.	

Clinical Uniform

Hair/headwear	Hairpieces, extensions and/or wigs will be approved on a case-by- case basis due to MRI safety concerns. Hair must be well groomed and clean. Beards and mustaches must be well groomed and clean. No head coverings of any kind, unless dictated by your religion and approved by the instructor.		
Tattoos	Facial tattoos are not permitted. Tattoos on other areas of the body are permitted; however, tattoos that contain inappropriate language, inappropriate symbols, or symbols or phrases that may be offensive to any segment of our associate or patient population are not permitted. In these circumstances, the tattoos will be required to be covered.		
Jewelry / Ornamentation	Discreet body piercings only unless dictated by religion and approved by the instructor.		
	NMT: The application of facial and lip cosmetics is strictly forbidden in nuclear medicine laboratories.		
	 MRI: Metallic objects, including some surgical placements, are forbidden in MRI laboratories (see MRI requirements) No more than 2 earrings in each ear. No rings EXCEPT wedding rings. No dangling necklaces/earrings/pendants. No necklaces longer than 18 inches. No bracelets. Watches are recommended but must follow MRI safety guidelines. Conservative facial makeup. Fingernails - well manicured, medium length, clear or natural unchipped polish may be worn. No artificial fingernails. 		
Miscellaneous	 Appropriate PPE must be worn at all times both on campus and at your clinical rotation facility. 		
	 No perfume or aftershave is to be worn. 		
	- No non-prescription sunglasses are permitted.		
	- Name badges should be worn face up at all times.		
	 Students are expected to maintain personal hygiene consistent with affiliate expectations. No gum chewing during class or clinical rotations 		

 No cell phones during clinical hours
 No jackets or sweatshirts permitted during clinical hours unless they are scrub jackets. Nuclear medicine students are required by federal regulations to wear appropriate lab coats during clinical rotations.

Nuclear Medicine Technology Pregnancy Policy

Working with radiation can be a concern for pregnant women. Under the University of Cincinnati Radiation Control and Safety Program (RCSP) the radiation dose received by pregnant and possibly pregnant workers is very low and well under the dose limit for a declared pregnant worker. By regulation, a licensee or registrant cannot force an individual to declare their pregnancy. By regulation, risks to the embryo/fetus, the option to declare a pregnancy and how to declare a pregnancy are expected to be reviewed with all radiation workers. The information is discussed with all new radiation workers who will be handling radioactive material. It is discussed during the initial site-specific training presented by the Radiation Safety Office (RSOf).

If a student chooses to declare their pregnancy, the medically confirmed pregnancy should be declared to the program director within 24 hours of confirmation. The student will then be counseled and review the U.S. Nuclear Regulatory Commission Appendix to Regulatory Guide 8.13, "Possible Health Risks to Children of Women Who Are Exposed to Radiation During Pregnancy".

The pregnant student electing to withdraw from the program may apply for readmission at the conclusion of the pregnancy. Acceptance is not guaranteed.

The pregnant student who elects to continue in the program must follow <u>all</u> college and program policies. Due to the competency-based nature of the Advanced Medical Imaging Technology Program, major alterations in clinical assignments and lab activities cannot be made up. As a result, the student electing to continue does so at her own risk in that neither the college nor the clinical affiliate can guarantee that the student would not exceed the maximum permissible dose of 0.5 rem during the entire gestation period.

After counseling, the student must sign and date the pregnancy form provided, documenting their decision on whether to withdraw or continue in the nuclear medicine technology program.

Magnetic Resonance Imaging Pregnancy Policy

It is the policy of the Magnetic Resonance Imaging section of the Advanced Medical Imaging Technology program at the University of Cincinnati to provide reasonable radio frequency protection to student technologists occupationally exposed to radio frequency. Pregnant students are expected to follow the recommendations of the ACR and the MRI department regarding pregnant health care practitioners as outlined in the ACR White Paper on Magnetic Resonance (MR) Safety and MRI Safety Policy for Pregnant Patients, Staff and Visitors.

ACR Pregnancy-Related Issues

Pregnant health care practitioners are permitted to work in and around the MR environment throughout all stages of their pregnancy. Acceptable activities include, but are not limited to, positioning patients, scanning, archiving, injecting contrast, and entering the MR scan room in response to an emergency. Although permitted to work in and around the MR environment, pregnant health care practitioners are requested not to remain within the MR scanner bore or Zone IV during actual data acquisition or scanning.

ACR Guidance Document on MR Safe Practices: <u>https://www.acr.org/-</u> /media/ACR/Files/Radiology-Safety/MR-Safety/Manual-on-MR-Safety.pdf

*Please see Appendix for Declaration of Pregnancy Forms

University Policies

University of Cincinnati Student Code of Conduct

University of Cincinnati Mission Statement

The University of Cincinnati is a public comprehensive system of learning and research. The excellent faculty have distinguished themselves world-wide for their creative pedagogy and research especially in problem solving and the application of their discoveries.

The University system is designed to serve a diverse student body with a broad range of interests and goals. It is a place of opportunity. In support of this mission, the University of Cincinnati strives to provide the highest quality-learning environment, world-renowned scholarship, innovation and community service, and to serve as a place where freedom of intellectual interchange flourishes.

All members of the University community shall take responsibility for conducting themselves in ways that continue the pursuit of the University's mission.

The Student Code of Conduct shall emphasize specific student responsibilities:

- To recognize that the intellectual and educational climate of the University shall be maintained as the University's highest priority.
- To protect the opportunity for each student to attain their educational objectives.

- To protect the physical and mental health, safety and welfare of each member of the University community.
- To protect the property rights of all.
- To promote the human rights of all members of the University community.

The Student Code of Conduct applies to all Advanced Medical Imaging Technology Students, including Certificate, Baccalaureate, or Graduate level students enrolled as a full-time or part-time student.

The Student Code of Conduct may be found in its entirety at the following link: http://www.uc.edu/conduct/Code_of_Conduct.html

Students are expected to abide by the professional codes of conduct and ethics associated with their current modality.

- American Registry of Radiologic Technologists
- American Society of Radiologic Technologists
- International Society of Magnetic Resonance in Medicine
- Nuclear Medicine Technology Certification Board
- Society of Nuclear Medicine and Molecular Imaging
- Society of Computed Tomography and Magnetic Resonance

Professional Behavior

Professional Conduct is expected and required at all times in the AMIT program. Unprofessional conduct includes, but is not limited to: the use of profane, vulgar or rude language in the classroom, teaching laboratory, discussion boards, office hours, telephone conversations and/or in emails; disrespectful behavior or inappropriate comments of any type aimed toward other students, program faculty/staff or clinical site employees; cheating and/or dishonesty; unethical behavior; unsafe practices during clinical experiences; and/or violation of Program, College, or University policies.

Clinical affiliates may impose specific rules for their site. Students are expected to follow <u>all</u> clinical guidelines at their site. Violation of clinical specific rules may result in disciplinary action, including dismissal from the AMIT program.

Citing unprofessional conduct is at the discretion of the course faculty and/or the Program Director. Unprofessional conduct will result in a conference between the student involved, the course Instructor, Program Manager and Program Director, if necessary. Repeated incidences of unprofessional conduct will result in disciplinary action. Repeated incidences of unprofessional conduct may result in dismissal from the program.

Academic Integrity Policy

In pursuit of its teaching, learning and research goals, the University of Cincinnati aspires for its students, faculty, and administrators to reflect the highest ethical standards defined by the center for academic integrity as "a commitment, even in the face of adversity, to six fundamental values: honesty, trust, fairness, respect, courage and responsibility." Although not all students are subject to a college honor code or pledge, every student is bound by the academic misconduct provisions of this code which are enforced, in part, to assure academic integrity.

Students at the University of Cincinnati are expected to uphold the highest level of academic integrity as outlined in the <u>Student Code of Conduct</u>.

Academic misconduct violations of the Student Code of Conduct include:

- Aiding and abetting misconduct
- Cheating
- Fabrication
- Plagiarism
- Violating Ethical or Professional Standards

For more info: <u>https://www.uc.edu/campus-life/conduct/academic-integrity/students.html</u>

HonorLock

Honorlock is an online proctoring tool that is fully integrated into Canvas. Honorlock uses AI (artificial intelligence) to monitor you during your test. The AI can alert a live proctor to pop in if it detects any potential violations, and a certified proctor may review the recording of your exam after you are finished. Your instructor will receive a report of any flagged incidents and a video of your exam session to review if necessary.

Setup Information

- 2. To get started, log in Canvas.
- 3. Click on the course you need to take the Honorlock assignment.
- 4. Click the Honorlock link in the left-hand navigation.

If there is not an Honorlock link in the left-hand navigation use the Assignments link and click the needed Assignment title.

- 5. If prompted, install the Google Chrome plugin.
- 6. Read, authorize, and agree to the Honorlock Guidelines.
- 7. Launch Proctoring.
- 8. Verify your identity using a photo ID.

Note:

Depending on the settings set by the instructor you may also have to do a room scan and set permissions on your device to allow Honorlock to record your screen or access your webcam.

Begin the exam.

Exams do not have be scheduled in advance. You can also access Honorlock proctored assignments or quizzes from the Assignments or Quizzes links in the left-hand navigation.

Privacy

UC takes student privacy very seriously. UC and Honorlock have a formal agreement in place that supersedes Honorlock's general Terms of Service and includes specific legal requirements for the privacy and security of UC student information.

Many questions have been received asking if Honorlock can access your devices and questioning how this impacts your security and privacy while taking a proctored exam.

Per Honorlock's Student Privacy Statement:

"Honorlock does not scan your network, your computer, your phone or any other devices on your network. Honorlock has no access to anyone's network or devices, nor could we unless we were given access by the owner or user. Furthermore, Honorlock does not route traffic from your device through our servers in any way."

More details on how Honorlock hosts, encrypts, and secures data can also be found in Honorlock's Student Privacy Statement.

Holidays and Breaks

Holidays and semester breaks as observed by the University of Cincinnati are published in the academic calendar (that can be found here).

Student Religious Accommodations for Courses

Pursuant to R.C. 3345.024, the University adopts the following Policy that reasonably accommodates the sincerely held religious beliefs and practices of individual students with regard to all examinations or other academic requirements and absences for reasons of faith or religious or spiritual belief system:

- 1. A student may be absent for up to three days each academic semester to take holidays for reasons of faith or religious or spiritual belief system or participate in organized activities conducted under the auspices of a religious denomination, church, or other religious or spiritual organization. A student needing to be absent more than three days during an academic semester for reasons of faith or religious or spiritual belief system or to participate in organized activities conducted under the auspices of a religious denomination, church, or other religious or spiritual belief system or to participate in organized activities conducted under the auspices of a religious denomination, church, or other religious or spiritual organization may make a request for such additional days. The instructor will review the particular request and engage in the interactive process with the requesting student as appropriate to determine whether and how the request for more than three days can be accommodated. The University shall not impose an academic penalty as a result of a student being absent as permitted in this Policy.
- 2. A student may be provided with alternative accommodations with regard to examinations and other academic requirements missed due to an absence described in section (1) of this Policy, if both of the following apply:
 - The students sincerely held religious belief or practice severely affects the student's ability to take an examination or meet an academic requirement.
 - b. Not later than fourteen days after the first day of instruction in a particular in-person course, or not later than fourteen days after the first day of the semester session for classes taught in a hybrid or online format, the student provides the instructor with written notice of the specific dates for which the student requests alternative accommodations. Students providing notice within this fourteen-day window will be granted up to three days to take holidays for reasons of

faith or religious or spiritual belief system or to participate in organized activities conducted under the auspices of a religious denomination, church, or other religious or spiritual organization. A student may request an alternative accommodation outside of the fourteen-day window, but the request should be made as soon as reasonably practicable and must be made prior to when the student expects to be absent. The instructor will review the particular request and engage in an interactive process with the requesting student as appropriate to determine whether and how the request can be accommodated.

- 3. An instructor shall accept without question the sincerity of a student's religious or spiritual belief system. The instructor shall keep requests for alternative accommodations confidential consistent with applicable laws including the Family Educational Rights and Privacy Act. The instructor shall schedule a time and date for an alternative examination, which may be before or after the time and date the examination or other academic requirement was originally scheduled but shall do so without prejudicial effect.
- 4. This Policy will be posted on the University's Office of Equal Opportunity and Access ("OEOA") website with the contact information of an individual from OEOA who can provide more information about the Policy.
- 5. OEOA will post a list of major religious holidays or festivals for the next two academic years. The posted list is non-exhaustive, and the list may not be used to deny accommodation to a student for a holiday or festival of the student's faith or religious or spiritual belief system that does not appear on the list.
- 6. Instructors must include in each course syllabus a statement regarding this Policy. The statement shall include both of the following:
 - a. A description of the general procedure for requesting accommodations.
 - b. Contact information for an individual whom a student may contact for more information about this Policy.

This Policy shall not be construed in such a way as to conflict or impair any right or activity protected by the U.S. Constitution or other applicable federal law. Nothing in this Policy, and no inclusion or exclusion of a religious holiday or festival on the list posted by the University (as set forth in section 5 of this Policy), shall preclude a student from full and reasonable accommodations for any sincerely held religious beliefs and practices with regard to all examinations or other academic requirements and absences for reasons of faith or religious or spiritual belief system.

Procedure

Any student with concerns about an alleged violation of this Policy is strongly encouraged, but not required, to first discuss those concerns with their instructor. Students may also report their concerns to OEOA.

Contact Information

For additional assistance please contact the Executive Director of Equal Opportunity & Access.

5150 Edwards Center 1 45 Corry Blvd Cincinnati, OH 45221 513-556-5503 oeohelp@uc.edu

University of Cincnnati Student Grievance Policy and Procedures

Section 504/ADA Grievance Procedure

The University of Cincinnati ("University") has adopted the following Grievance Procedure for addressing complaints of discrimination under Section 504 of the Rehabilitation Act of 1973 and Title II of the Americans with Disabilities Act of I 990. The University does not tolerate discrimination on the basis of disability in its programs or activities and will take prompt and effective steps to address disability discrimination (including disability harassment and retaliation), end a hostile environment if one has been created, and prevent the recurrence of disability discrimination.

This procedure applies to all individuals, including students and employees, who may experience or witness disability discrimination in a university program or activity. This procedure is designed to provide a prompt, reliable, and impartial procedure for the resolution of disability discrimination complaints.

For more information about University of Cincinnati's grievance procedures, please visit the link: <u>https://www.uc.edu/campus-life/accessibility-resources/policies-and-grievance-procedure.html</u>

Please note: There are separate University Grievance Procedures for graduate students and employees. Graduate Student Grievance Procedures are available from the Graduate School.

Immunization Requirements & Bearcats Health App

Please click this link to see the University of Cincinnati Vaccine Requirement <u>deadlines</u>

- → Summer 2024 Semester: May 5, 2024
- \rightarrow Fall 2024 Semester: August 25, 2024
- → Step 1: Review below to see which immunizations you are required to have. If you have questions on immunizations or the policy, please contact UHS at <u>UHSTracking@ucmail.uc.edu</u>.

Step 2: Go to <u>Bearcats Health App</u> and use your UC username and password to access your account.

Step 3: Once in the <u>Bearcats Health App</u> system, download and print the standardized immunization form from their site (this can also be found on below). *You must use this form, no other forms will be accepted by the system*. DO NOT attach outside documents to your form.

Step 4: You can get the required immunizations through your medical provider or University Health Services (513-556-2564). Have your medical provider complete, sign, and stamp the form.

Step 5: Upload your completed form through your Bearcats Health App online account. You will be notified within your account dashboard if you are missing items, or if you are fully compliant

All incoming undergraduate, graduate and professional students attending main campus, UC Blue Ash, and UC Clermont must comply with this policy. Please see one of the pages

below to learn which immunizations are required for you:

- <u>Health Sciences Programs</u>
- General Population Students
- International Students
 - → Immunizations will not be required at this time for those in designated Distance Learning programs (unless enrolled in any Health Professions Distance Learning program that has a practicum or clinical requirement), however you may choose to participate. UHS advises all students to be up-to-date on vaccines recommended by the <u>Advisory Committee for Immunization Practices</u>. Please also note that even though the University of Cincinnati may not require immunizations, many, if not all, AMIT clinical affiliate partners do, and some may require the student to show proof of vaccinations and/or an approved exemption letter.

Forms

Immunization Forms

- General Population, ELS, International Immunization Requirements Form
- Health Professions Programs Immunization Requirements Form
 - → *This standardized immunization form is the **only** document that will be accepted by Bearcats Health app. **DO NOT** include any outside documents, they will be rejected by the system.

General Population Exemption Forms

• <u>General (Non-Medical) Exemption Form</u> (Upload this form to Bearcats Health App if you wish to request an exemption)

• <u>Medical Exemption Form</u> (Upload this form to Bearcats Health App if you wish to request an exemption)

Health Sciences Exemption Form

• <u>Exemption Form</u> *this form is for Health Sciences programs only. If you have questions, please contact Alex Maus (<u>alex.maus@uchealth.com</u>) or Deana Brown c(<u>deana.brown@uchealth.com</u>).

Equal Access and Accessibility

If a student has special needs related to participation in this program, including identified visual impairment, hearing impairment, physical impairment, communication disorder, and/or specified learning disability that may influence performance in this program, the student is encouraged to contact the Accessibility Resources Office. Students are advised to do so upon acceptance into the program or upon diagnosis. Certain accommodations may require prior approval by the Accessibility Resources Office (https://www.uc.edu/campus-life/accessibility-resources.html).

For more information and to register with the accessibility resources office visit:

https://www.uc.edu/campus-life/accessibility-resources.html

Accessibility Resources Office Location & Hours

210 University Pavilion Phone: 513-556-6823 Fax: 513-556-1383 E-mail: accessresources@uc.edu

Board Examination ADA Compliance

It is the responsibility of each individual student to apply for accommodations with the national board examination board(s) should they be eligible to do so. All board examinations students may sit for in this program comply with ADA Compliance. Any questions or concerns about ADA Compliance for the Board Examinations should be directed to the **appropriate** agency. More information can be found at the specific links below.

ARRT Primary Pathway – page 10

https://www.arrt.org/docs/default-source/handbooks/arrt-primaryhandbook.pdf?sfvrsn=6604fc_22

NMTCB

https://www.nmtcb.org/exam/instructions.php

CAHS Social Media Policy

The University of Cincinnati's College of Allied Health Sciences is committed to leveraging technology to educate our students to become skilled leaders. Our primary methods of communication are the UConnect (UC) e-mail account, Canvas and My Bearcat Network. However, we support the use of social media outlets as a supplemental venue for elective unofficial communication and reminders.

While we strongly advocate for all members of the College of Allied Health Sciences community to utilize various social media outlets, all must be aware of the content of posts. Social media is not the appropriate venue to share and address all matters.

Individuals are responsible and will be held accountable for the content of their posts on any social media platform. The College of Allied Health Sciences developed this social media policy to appropriately represent, advance, and protect members of our community and the University of Cincinnati.

The process for establishing and maintaining social media accounts related to CAHS departments and/or academic programs is defined below.

Social Media Definition

Social media is characterized as a platform of electronic communication (web sites for social networking and blogging) through which users create online communities

to share information, ideas, personal messages, and other content (videos, pictures), etc.

Examples of social media outlets may include, but are not limited to:

- → Social Networking Sites (Facebook, LinkedIn, Pinterest, Snapchat, Instagram, Flickr)
- → Content Communities (YouTube, Tik-Tok)
- \rightarrow Micro-blogging sites (Twitter)
- → Blogs (company and personal blogs, Wordpress, Blogger), Forums and Discussion Boards, Google Groups, Yahoo! Groups)

Provisions of the Social Media Policy

- → Personal and professional growth and learning are a result of engaging in conversations and sharing opinions. You must be aware of the content and behavior of your activity as you participate in social networking.
- → Social media sites do not ensure privacy regardless of the privacy restrictions you have enabled on your accounts. Search engines can recover posts even if they were deleted. If you hesitate when posting, do not post without consulting with an appropriate authority, such as your faculty instructor or faculty and staff, a supervisor.
- → Do not post confidential information about yourself or others. You may not post photos from a health care site unless you have obtained the appropriate consent from the individuals in the photo and from the organization in which the photo was taken.
- → There is an expectation to be respectful, responsible, and accountable for behavior with any interaction and communication with others via social media. Unacceptable posts would include (but are not limited to) ethnic slurs, personal insults, or obscenity. You should also show proper consideration for others' viewpoints on topics considered sensitive, such as politics and religion.
- → Publish and post on social media platforms with caution. Content should be honest, accurate, and in good taste.
- → You are legally liable for any social media activity. Posts to social media sites deemed defamatory, harassing, obscene, profane, unprofessional, or in violation of any law will not be tolerated and are subject to disciplinary action.
- → The expectation is all social media use will adhere to all applicable university privacy and confidentiality policies, including the Family Educational Rights and Privacy Act (FERPA) and the Health Insurance Portability and Accountability Act of 1996 (HIPAA).

- → Ensure content created on social media platforms uses inclusive and accessible language and practices.
- → As faculty, staff and students at the University of Cincinnati's College of Allied Health Sciences, it is your responsibility to continually review the provisions of the social media policy.

Consequences for Violation of Policy

Violations of the Student Code of Conduct, AAUP contract, University policies and/or state or federal laws as it relates to social media will be responded to by the appropriate authority.

Academic Advisor Meeting Policy

Scheduling an appointment with an Academic Advisor:

- Although course faculty and student success coordinators can answer most students' questions, sometimes students need the assistance of an academic advisor, to seek advice about academic progression (good standing, alert, probation and suspension) and GPA rehabilitation.
- The College of Allied Health Sciences has an Office of Student Affairs which provides advising for undergraduates in the college. To request advising, call OSA at 513-558-8556 or email <u>cahsadvi@uc.edu</u>

Graduation

Graduation is the official completion of your academic degree which closes your AMIT program. Commencement is the celebration for graduating students. **All students MUST apply for graduation to receive their diploma and become official University of Cincinnati graduate**.

It is optional to attend a commencement ceremony in Cincinnati. In order to qualify for graduation, a student must fulfill the program requirements with at least a **2.5 college GPA.** Students must be in good academic standing, that is, not on academic or disciplinary probation nor suspension.

Students should always be aware of their anticipated graduation. Any time students deviate from their original program plan, they should contact their h academic advisor to obtain an updated degree plan to determine their expected graduation.

Graduation applications must be completed by the student during their final semester by the established deadline of the University. The graduation application can be found here:

http://www.uc.edu/registrar/graduation/application_information.html.

Please note: Students are responsible for knowing and complying with graduation application deadlines. Graduation applications will not be accepted after the established deadline for the semester. There is a non-refundable fee associated with this application.

UC holds three commencement ceremonies per year. Because AMIT students complete the program at the end of the summer semester, program graduates will attend the August commencement. Specific information about commencement will be posted on the following web site as information becomes available here: http://www.uc.edu/commencement/.

Records Privacy and Release Information for Parents

This program holds student privacy in high regard and will follow FERPA standards with regards to student privacy. Parents wishing to gain access to student records at the University of Cincinnati will need to be aware of the federal government regulations with which the University is obliged to comply.

FERPA Statement

UC's record release policies are governed by federal government regulations collectively known as the "Family Educational Rights and Privacy Act of 1974, as Amended" (FERPA) and by State of Ohio law.

*University of Cincinnati cannot waive FERPA or State regulations for any reason.

Parents as Third Parties

Under FERPA, Record Privacy rights transfer from the parents to the student once the student reaches 18 years of age or once they enroll in an institution of higher learning. In either scenario, FERPA then regards the parents as third parties.

Record release to all third parties requires the student's prior written and signed consent. Parents may obtain student end-of-term grades and GPA information, **only if**:

- The student grants the parent permission via <u>Delegated Access in Catalyst</u> (the University's preferred method of obtaining permission)
- They can provide the Registrar's Office with a copy of their most recently submitted federal tax return documents establishing the student as their financial dependent (family income amounts may be obscured); or
- The student provides the Registrar's Office with their written, signed, and dated consent (the student can rescind this authorization in writing at any time).

University Discretion

Record release to parents (and to all third parties) occurs at the University's discretion, even if the parents provide the qualifying tax return or the student's written consent. The University reserves the right to deny requests for any and all student information to all third parties, *including parents*.

UC may provide properly authorized parents seeking grade information with end-of-term grades and grade point averages **only**. UC **will not** release attendance records, assignment scores, or test scores.

The student's written consent or the parents' tax return may allow record release **only**. These documents do not constitute Power of Attorney, so these **do not** authorize the parents to take action in the student's name or on the student's behalf.

Third–Party Requests

All third–party requests to UC for student records must be submitted in writing directly to the Registrar's Office. In *all* cases, third parties (including parents) attempting contact administrative offices, college offices, or the faculty will be referred to the Registrar's Office.

The Registrar's Office will assess both the parent's written request and the submitted authorizing documents and will provide a response. The Registrar's Office will contact

other administrative and/or college offices for the information, as required. Parents should not expect a same day response from the Registrar's office to their information requests.

Per-Term Information Requests

UC *does not* provide regular or automatic per-term information releases (e.g., final grades) to any third party (including parents). Parents authorized for release by either the student's written consent or by their own tax return *must* submit a written request to the Registrar's Office on each occasion.

Directory Information Releases

FERPA permits UC to release the student's Directory Information to anyone upon request without the student's prior consent or notification. Directory Information at UC includes: name, student identifier (non-Social Security Number), current mailing address, current telephone number, email address, college, class, major, dates of attendance, enrollment status (full/ part-time), and degrees/honors/awards received (including dates received).

Students may request that UC not release their Directory Information by <u>updating their</u> preferences in Catalyst.

Further Information

You can learn more about the "Family Educational Rights and Privacy Act of 1974, as Amended" (FERPA) from the <u>U.S. Department of Education's Family Policy Compliance</u> <u>Office.</u>

Immunization records including COVID19, criminal background check, HIPAA, OSHA, Radiation Safety, MRI safety, ect

Information release to clinical sites – USE AN APPENDIX FOR THE FORM STUDENTS MUST SIGN We post student images – consent also in an APPENDIX

Appendix A

Personally Identifiable Information/Record Release Authorization Form

Student's Name: ______ (Please print)

M Number: _____

As required by the Family Educational Rights and Privacy Act of 1974, as Amended (FERPA), by my signature below I hereby authorize University of Cincinnati to furnish the following information to one or more of the following clinical education settings as listed below upon request. This information is necessary to meet healthcare institution requirements for patient safety and accreditation. Students may also be required to undergo drug testing in order to participate in clinical experience at some clinical educational record, as appropriate, to personnel at Facility who have a legitimate need to know in accordance with the Family Educational Rights and Privacy Act. Facility agrees that its personnel will

use such information only in furtherance of the Program, and that the information shall only be disclosed to third parties in accordance with the Family Educational Rights and Privacy Act.

Clinical Education Settings:

- Baptist Health Lexington 1740 Nicholasville Rd, Lexington, KY 40503
- Bethesda Arrow Springs 100 Arrow Springs Boulevard, Lebanon, OH 45036
- Bethesda North Hospital-10500 Montgomery Road, Cincinnati, OH 45242
- The Christ Hospital-2139 Auburn Avenue, Cincinnati, OH 45219
- Cincinnati Children's Hospital Medical Center 3333 Burnet Avenue, Cincinnati, OH 45229
- Cincinnati Children's Hospital Medical Center Liberty Campus- 7777 Yankee Road, Liberty Township, OH 45044
- Cincinnati Children's Imaging Research Center 3333 Burnet Avenue, Cincinnati, OH 45229
- Dayton Children's Hospital 1 Childrens Plaza, Dayton, OH 45404
- Fort Hamilton Hospital- 630 Eaton Avenue, Hamilton, OH 45013
- Good Samaritan Hospital- 375 Dixmyth Avenue, Cincinnati, OH 45220
- Good Samaritan Glenway 6350 Glenway Avenue, Cincinnati, OH 45211
- Good Samaritan Medical Center at Western Ridge- 6949 Good Samaritan Drive, Cincinnati, OH 45247
- Jewish Hospital- 4777 East Galbraith Road, Cincinnati, OH 45236
- Mercy Health Anderson 7500 State Road, Cincinnati, OH 45255
- Mercy Health Clermont- 3000 Hospital Road, Batavia, OH 45103
- Mercy Health Fairfield- 3000 Mack Road, OH 45014
- Proscan Eastgate- 4440 Glen Este-Withamsville Road, Cincinnati, OH 45245
- Proscan Mason- 4900 Parkway Drive, Cincinnati, OH 45040
- Proscan Midtown- 5400 Kennedy Avenue, Cincinnati, OH 45213
- Proscan Paul Brown Stadium- 6 Paul Brown Stadium, Cincinnati, OH 45202
- Proscan Tri County- 12124 Sheraton Lane, Cincinnati, OH 45246
- Proscan Tylersville- 7307 Tylers Corner Drive, West Chester, OH 45069
- Proscan Troy- 45 South Stanfield Road, Troy, OH 45373
- Proscan Westside- 6125 Harrison Avenue, Suite A, Cincinnati, OH 45247
- Soin Medical Center Kettering Health 3535 Pentagon Blvd, Beavercreek, OH 45431
- St. Elizabeth Dearborn 600 Wilson Creek Road, Lawrenceburg, IN 47025

- St Elizabeth Edgewood- 1 Medical Village Drive, Edgewood, KY 41017
- St Elizabeth Florence- 4900 Houston Road, Florence, KY 41042
- St Elizabeth Ft Thomas- 85 North Grand Avenue, Ft Thomas, KY 41075
- TriHealth Beechmont Anderson- 7777 Beechmont Avenue, Cincinnati, OH 45255
- TriHealth Kenwood 8240 Northcreek Drive, Cincinnati, OH 45236
- University of Cincinnati Radiation Safety-170 Panzeca Way, Cincinnati, OH 45267
- University of Cincinnati Medical Center 234 Goodman Street, Cincinnati, OH 45219
- UC Health West Chester 7700 University Drive, West Chester, OH 45069
- UK Health Care, Albert B. Chandler Hospital 800 Rose St, Lexington, KY 40536
- V.A. Medical Center-3200 Vine Avenue, Cincinnati, OH 45220

Possible Information Provided:

- My Name
- My Image
- My Social Security Number
- My Gender
- My Date of Birth
- MRI Screening Form/Information
- Background Check: Federal and State

Student's Signature: _____

Date:_____

Appendix B: Pregnancy Form – Magnetic Resonance Imaging

MRI Safety Policy:

Pregnant staff and health care providers may enter the scan room when the static field is on but should not remain in the room during the scan.

Upon medical verification of her pregnant condition, written disclosure of the said condition to program officials is the student's responsibility and is to be initiated voluntarily. Students have the right to refuse disclosure of medical information; however, in the event that a student chooses not to disclose information regarding pregnancy, the student is acknowledging that they are assuming all responsibility for their condition and any potential complications that may arise.

Upon medical verification that a pregnancy exists, students have the following four (4) options:

Option #1 – Elect to withdraw from the Advanced Medical Imaging Technology program.

□ By choosing this option, the student will withdraw from the program effective immediately and will be immediately removed from their current clinical rotation.

<u>Option #2</u> - Elect to continue in the Advanced Medical Imaging Program realizing that there may be possible restrictions implemented by my clinical sites.

- □ If the student so decides, they may continue in the Program under the following conditions:
 - The student shall not remain in the scan room during actual data acquisition or scanning.
 - The student shall participate in all scheduled clinical rotation areas as assigned.
 - Absences due to pregnancy are governed by the Attendance and Medical Leave of Absences policy.

<u>Option #3 –</u> Elect to continue in the Advanced Medical Imaging Program without any program modifications assuming all responsibility to you and your fetus' health.

By choosing this option, the student implies acknowledgement that she has chosen to disregard the recommendations made by the ACR and the Program and that she is assuming responsibility for all potential risks and related complications.

Option #4 – Withdraw the Declaration of Pregnancy Form

By choosing this option, the student acknowledges that their declaration of pregnancy is hereby officially withdrawn. The student implies acknowledgement that they are assuming responsibility for all potential risks and related complications

Pregnancy Form - Magnetic Resonance Imaging

Officially, I am declaring my pregnancy to ta program faculty member. I the undersigned do hereby acknowledge that I have been counseled regarding the possible health risks to my unborn fetus and my option to either withdraw or continue in the program in full accordance with the Advanced Medical Imaging Technology Program written Magnetic Resonance Imaging Pregnancy Policy.

Below, I have indicated the option I choose to select:

 I elect to withdraw from the Advanced Medical Imaging Technology Program.		
Signature	Date	
 I elect to continue in the Advanced Medical Imaging Program realizing that there may be possible restrictions implemented by my clinical sites.		
Signature	Date	
 I elect to continue in the Advanced Medical Imaging Program without any program modifications assuming all responsibility to me and my fetus' health.		
Signature	Date	
 Effective immediately, I am officially withdrawing my declaration of pregnancy.		
Signature	Date	

As the Clinical Coordinator, I have reviewed the possible health risks with the student and have confirmed her program withdraw or continuation as signed above

Signature

Date

Withdrawal of Declaration of Pregnancy

The student has the right to withdraw their declaration of pregnancy, and if the student chooses to do so, this Withdrawal of Declaration of Pregnancy form must be completed by the student and submitted to program faculty. By filling out this form, the student

acknowledges that their declaration of pregnancy is hereby officially withdrawn. The student implies acknowledgement that they are assuming responsibility for all potential risks and related complications. All documentation shall be entered into the student's permanent personal file.

I, the undersigned, do hereby acknowledge that by withdrawing my declaration of pregnancy I assume responsibility for all potential risks and related complications associated with this decision.

I elect to withdraw my declaration of pregnancy from the Advanced

Medical Imaging Technology Program.

Signature

Date

Declaration of Pregnancy

To: Radiation Safety Office (ML 0591; Fax 558-9905) Medical Science Building, Suite 5402 231 Albert Sabin Way Cincinnati, OH 45267-0591 Date (of declaration) : _____

From (your name): _____

This completed form is being submitted today to the University of Radiation Safety Office and is the official notification to the University of Cincinnati Radiation Control and Safety Program that I am pregnant.

I understand this declaration of pregnancy is a personal choice and optional under the University of Cincinnati's Radiation Control and Safety Program. I understand that during the period of pregnancy declaration my occupationally allowed radiation dose will be reduced to 500 millirem to the fetus. I understand, again because of personal choice, I may "undeclare" my pregnancy, in writing, at any time.

I provide the following information to ensure regulatory requirements are met and to assist in determining if additional monitoring or special precautions are necessary.

Information Regarding My expirience to Ionizing Radiation

I work with radioactive material under the supervision of (AU(s) name)______

□ Radionuclides I will be using or have used during my pregnancy

□ I work with radiation generating equipment (RGE) under supervision of

□ RGE I will be using or have used during my pregnancy

□ I am exposed to radiation from the following radionuclide(s) or RGE, but I am not currently working with them

Information Regarding My Pregnancy

My estimated date of conception is: _____

My delivery Date is on (or about): ______

Information Regarding My Dosimetry

- □ I currently am issued the following personnel monitoring dosimetry
 - [] 1 whole body dosimeter
 - [] 2 whole body dosimeter
 - [] hand (ring) dosimeters
 - [] I will personally pick up my badge
 - [] Deliver my badge with my department badges
- □ I currently am not issued any radiation monitoring dosimetry

For any questions, call me at my work number _____

or home number _____

I am aware the Radiation Safety Office has copies of NRC regulatory guide 8.13 "Instruction Concerning Prenatal Radiation Exposure" that I may review and I can also obtain a copy from the NRC website, <u>http://www.nrc.gov/</u> I understand I may speak with a member of the Radiation Safety Office about my radiation exposure and the Radiation Safety Officer encourages me to make an appointment to speak to someone from the Radiation Safety Office as soon as possible if I have any questions or concerns.

RS FORM 33 (5/15)

Appendix C: PREGNANCY FORM – Nuclear Medicine Technology

I the undersigned do hereby acknowledge that I have been counseled regarding the possible health risks to my unborn fetus and my option to either withdraw or continue in

the program in full accordance with the Advanced Medical Imaging Technology Program written Pregnancy Policy.

Below, I have indicated the option I choose to select:

 I elect to withdraw from the Advanced Medical Imaging
 Technology Program in order to protect my unborn fetus from any unnecessary radiation exposure.

Signature

Date

2. I elect to continue in the Advanced Medical Imaging Program realizing that my radiation exposure may exceed the maximum permissible dose of 0.5 rem during the entire gestation period and do so at my own risk.

Signature

Date

RELEASE & INDEMNITY IN CONNECTION WITH A STUDENT TRIP, OUTINGS AND/OR ACTIVITIES

As a member or guest of the Advanced Medical Imaging Technology Student Organization, I will participate in the ______ at_____ on

The risks associated with this activity include, but are not limited to:

I agree to the following:

•

- 1) I (we) voluntarily accept and assume the risk for any injury I may receive as a result of my participation in the above described activity(ies).
- 2) I (we) release the University of Cincinnati, Advanced Medical Imaging Technology Student Organization, and their trustees, officers, employees, and agents from all liability or any injury I may receive as a result of my participation in the above described activity(ies) and agree to hold them harmless and indemnify them for any claim made against them by virtue of my conduct in connection with my participation in the above described activity(ies).
- 3) I (we) acknowledge that the University recommends that I (we) obtain (our) own insurance coverage (i.e., student health plan, family coverage, etc.)

	Signature of Participant	Birthdate
	Print Name	
	Signature of Parent or Legal Guardian	
	*Persons who are 18 years of age or older may sign this waiver w signatures or parent or guardian	ithout any accompanying
Name of Parti	cipant:	
	Insurance Information	

____ Yes, I have my own full medical insurance coverage or am cover by my parents' or guardians' medical insurance policy

	Carrier:	
	Policy Number:	
Please list s	pecial needs:	
Medical:		
Allergies:		
Medications	S:	
Dietary:		
	Emergency Information	
In case of er	mergency, please contact	
	Relationship	
Home Phone	e: Work Phone:	

Clinical Competencies

Magnetic Resonance Imaging Didactic and Clinical Competency Requirements

MRI Practice Standards

The practice of magnetic resonance is performed by a segment of health care professionals responsible for the use of radiofrequencies (RFs) within a magnetic field on humans and animals for diagnostic, therapeutic or research purposes. A magnetic resonance technologist performs magnetic resonance procedures at the request of and for interpretation by a licensed independent practitioner.

The complex nature of disease processes involves multiple imaging modalities. Although an interdisciplinary team of clinicians, magnetic resonance technologists and support staff plays a critical role in the delivery of health services, it is the magnetic resonance technologist who performs the magnetic resonance examination that creates the images needed for diagnosis.

Magnetic resonance integrates scientific knowledge, technical competence and patient interaction skills to provide safe and accurate procedures with compassion. A magnetic resonance technologist recognizes patient conditions essential for the successful completion of the procedure.

Magnetic resonance technologists must demonstrate an understanding of human anatomy, human physiology, pathology, pharmacology and medical terminology. They must maintain a high degree of accuracy in positioning and magnetic resonance technique. Magnetic resonance technologists must possess, use and maintain knowledge about magnetic protection and safety. Magnetic resonance technologists independently perform or assist the licensed independent practitioner in the completion of diagnostic, therapeutic, interventional and fusion magnetic resonance procedures. Magnetic resonance technologists prepare, administer and document

activities related to medications in accordance with state and federal regulations or lawful institutional policy.

The magnetic resonance technologist is the primary liaison between patients, licensed independent practitioners, and other members of the support team. Magnetic resonance technologists must remain sensitive to the needs of the patient through good communication, patient assessment, patient monitoring and patient care skills. As members of the health care team, magnetic resonance technologists participate in quality improvement processes and continually assess their professional performance.

Magnetic resonance technologists think critically and use independent, professional and ethical judgments in all aspects of their work. They engage in continuing education to include their area of practice to enhance patient care, public education, knowledge and technical competence.

In the AMIT MRI program, all students will employ proper (non-ionizing) radiation and MR safety practices by comprehension of and adhering to the following Food and Drug Administration (FDA) specific absorption rate (SAR) limits when performing MR procedures on patients:

Whole body = 4 watts/kg for 15 minutes exposure average Head = 3 watts/kg for 10 minutes exposure average Head & Torso = 8 watts/kg for 5 minutes exposure average Extremity = 12 watts/kg for 5 minutes exposure average

* The ASRT MRI Practice Standards complete document can be found:

https://www.asrt.org/main/standards-regulations/practice-standards/practice-standards

MRI Program Outcomes and Goals

Outcome	Goal
---------	------

The student will demonstrate critical thinking skills.	 Goal – To increase critical thinking skills in relation to the following: Improving patient care through self-evaluation and critique. MR techniques, parameters and trade-offs in order to ensure high diagnostic images
The student will communicate effectively in a variety of professional settings.	Goal – To improve and gain experience in students professional communication skills.
The student will demonstrate high standards of clinical competence.	Goal – To develop the student's proficiency in imaging procedures and patient care skills by strictly following all ARRT MRI scan requirements.
The student will demonstrate high standards of social responsibility by engaging in ethical professional practice.	Goal – To foster a high degree of professionalism, responsibility, and ethical behavior within the student.
The student will synthesize professional knowledge and evaluate varying viewpoints.	Goal – To develop/nurture the necessary tools to allow synthesis of information, introspection and self-reflection to achieve the best patient outcomes.

MRI Program Effectiveness Outcomes

- The program will enroll and graduate students who will benefit from the program of study.
- Student will enroll into the MRI program. Students will complete the program.
- Graduates will pass their ARRT on their first attempt.
- Graduates will obtain employment within 12 months of graduation.
- Graduates will be satisfied with their program of study.
- Graduates are prepared for entry-level work in MRI.



Advanced Medical Imaging Technology (AMIT) Magnetic Resonance Imaging (MRI) Screening Questionnaire

This form is required to be completed by all AMIT MRI students.

The MR system is a very strong magnetic field that may be hazardous to individuals entering the MR environment or MR system room if they have certain metallic, electronic, magnetic, or mechanical implants, devices or objects. Therefore, all individuals are required to fill out this form BEFORE entering the MR environment or MR system room. Be advised, the MR system magnet is ALWAYS on.

Last Name:	 First Name:	

Email Address:		Phone:	
----------------	--	--------	--

Have you had prior surgery or an operation of any kind?

□ Yes □ No

If yes, then please indicate date and type of surgery:

Have you had an injury to the eye involving a metallic object (e.g. metallic slivers, foreign body)?

YesNo

If yes, then please describe:

Have you ever been injured by a metallic object or foreign body?

YesNo

If yes, then please describe:

WARNING:

Certain implants, devices or objects may be hazardous to you in the MR environment or MR system room. Do not enter the MR environment or MR system room if you have any question or concern regarding an implant, device or object.

Please indicate if you have any of the following:

- \Box Aneurysm clip(s)
- □ Cardiac pacemaker
- □ Implanted cardioverter defibrillator (ICD)
- □ Electronic implant or device
- □ Magnetically activated implant or device
- □ Neurostimulation system
- □ Spinal cord stimulator
- Cochlear implant or implanted hearing aid
- □ Insulin infusion pump
- □ Implanted drug infusion device.
- □ Any type of prosthesis or implant
- □ Artificial or prosthetic limb
- □ Any metallic fragment or foreign body
- □ Any external or internal metallic object
- □ Hearing aid
- □ Other implant/device

Important Instructions:

Remove all metallic objects before entering the MR environment or MR system room including hearing aids, beeper, cell phone, keys, eyeglasses, hair pins, barrettes, jewelry (including body piercing jewelry), watch, safety pins, paperclips, money clip, credit cards, bank cards, magnetic strip cards, coins, pens, pocket knife, nail clipper, steel-toed boots/shoes, and tools. Loose metallic objects are especially prohibited in the MR system room and MR environment.

Please consult with the Advanced Medical Imaging Technology (AMIT) program if you have any question, or concern, BEFORE you enter the MR system room or the AMIT program.

I attest that the above information is correct to the best of my knowledge. I have read and understand the entire contents of this form and have had the opportunity to ask questions regarding the information on this form.

Signature: _____ Date: _____

AMIT MRI Student Clinical Site Orientation Checklist

This form is to be completed by the Supervising Technologist on the first day of clinical rotation to ensure MRI student technologist has been formally orientated on the items listed below.

Upon completion, MRI student technologist will submit this form to AMIT MRI program faculty.

- □ MRI safety procedures
- \Box Quench/Emergency stop/O² sensor alarm procedures
- □ Fire safety and procedures
- □ Evacuation procedures
- □ Chemical spill/hazard procedures
- □ HIPAA training
- □ Emergency Overhead Code training
- □ Cardiac/Respiratory Code training and procedures
- □ Electrical hazard procedures
- □ Standard precautions
- □ Venipuncture (if applicable)

 Clinical Site
 Supervising Technologist (Print & Signature)
 Student Technologist Signature (Print & Signature)
 DATE

MRI Student Supervision Policy

All students are required to perform imaging procedures under the **direct supervision** of a qualified practitioner until the student achieves competency. After achieving competency, students are required to perform imaging procedures under **indirect supervision** of a qualified magnetic resonance technologist.

JRCERT standards 4.4, 4.5, and 6.2 provides further guidance in "qualified magnetic resonance technologist." Students are only allowed to work under the direct and indirect supervision from ARRT MR registered technologists. <u>Under no circumstances</u> should students be supervised, either indirectly or directly, by a technologist who is not registered by the ARRT in magnetic resonance imaging. If a student should be in a clinical area without an ARRT MR registered technologist due to clinical instructor or qualified personnel absence, they should contact the program director immediately for clinical reassignment.

Direct supervision is defined as student supervision by a qualified magnetic resonance technologist who reviews the procedure in relation to the student's achievement, evaluates the condition of the patient in relation to the student's knowledge, is physically present during the conduct of the procedure, and reviews and approves the procedure and/or image.

Indirect supervision is defined as that supervision provided by a qualified magnetic resonance technologist immediately available to assist students regardless of the level of student achievement. "Immediately available" is interpreted as the physical presence of a qualified magnetic resonance technologist adjacent to the room or location where a magnetic resonance procedure is being performed. This availability applies to all areas where magnetic resonance equipment is in use on patients.

All students are required to perform imaging procedures under the **direct supervision** of a qualified practitioner until the student achieves competency. After achieving competency, students are required to perform imaging procedures under **indirect supervision** of a qualified magnetic resonance technologist.

 \Box I have read and understand the information in this policy.

Student Name and Signature

Date

MRI Student Supervision Policy

All students are required to perform imaging procedures under the **direct supervision** of a qualified practitioner until the student achieves competency. After achieving competency, students are required to perform imaging procedures under **indirect supervision** of a qualified magnetic resonance technologist.

JRCERT standards 4.4, 4.5, and 6.2 provides further guidance in "qualified magnetic resonance technologist." Students are only allowed to work under the direct and indirect supervision from ARRT MR registered technologists. <u>Under no circumstances</u> should students be supervised, either indirectly or directly, by a technologist who is not registered by the ARRT in magnetic resonance imaging. If a student should be in a clinical area without an ARRT MR registered technologist due to clinical instructor or qualified personnel absence, they should contact the program director immediately for clinical reassignment.

Direct supervision is defined as student supervision by a qualified magnetic resonance technologist who reviews the procedure in relation to the student's achievement, evaluates the condition of the patient in relation to the student's knowledge, is physically present during the conduct of the procedure, and reviews and approves the procedure and/or image.

Indirect supervision is defined as that supervision provided by a qualified magnetic resonance technologist immediately available to assist students regardless of the level of student achievement. "Immediately available" is interpreted as the physical presence of a qualified magnetic resonance technologist adjacent to the room or location where a magnetic resonance procedure is being performed. This availability applies to all areas where magnetic resonance equipment is in use on patients.

All students are required to perform imaging procedures under the **direct supervision** of a qualified practitioner until the student achieves competency. After achieving competency, students are required to perform imaging procedures under **indirect supervision** of a qualified magnetic resonance technologist.

I have read and understand the information in this policy. As the clinical setting instructor I take responsibility for enforcing and monitoring these supervision requirements.

Clinical Instructor Name and Signature	Date
Chinear instructor rame and Signature	Dutt

Clinical Setting Name

MRI ARRT Clinical Competency Completion Policy

Demonstration of clinical competence means the student has performed the procedure(s) independently, consistently, and effectively during their formal education. Competent performance of these fundamental activities, in conjunction with mastery of the knowledge and cognitive skills covered by the MRI examination, provides the basis for the acquisition of the full range of procedures typically required in a variety of settings.

General Performance Considerations

- 1) Patient Diversity
 - a. Variations in patient characteristics such as age, gender and medical condition.
- 2) Patient Care Simulated Performance (CPR, Venipuncture, ECG)
 - a. Competently demonstrate skills as similar as circumstances permit to the cognitive, psychomotor, and affective skills required for performing the procedures on patients.
 - b. Skills required to competently perform the simulated task will generalize or transfer to patient scanning. The student must evaluate related images.
- 3) Elements of Competence
 - a. Program director, clinical coordinator, or clinical site preceptor must observe the student performing the procedure independently.

Magnetic Resonance Imaging Specific Requirements

Candidates must demonstrate competence in the following areas:

- 7 mandatory general patient care procedures
 - Procedures should be performed on patients whenever possible, but simulation is acceptable following the above guidelines regarding simulation.

- 8 mandatory MRI safety requirements -
 - Student must demonstrate competence
- _ 17 mandatory MRI imaging procedures
 - Procedures MUST be completed on actual patients following above guidelines for demonstrating competence.
- 11 of 30 elective MRI imaging procedures _
 - Procedures should be performed on patients; however, up to 5 of the elective procedures may be performed on volunteers (provided site approves of scanning volunteers and there is a policy to protect the volunteer and the site). All volunteer scans must be limited to the summer semester completions.
- 7 mandatory MRI quality control procedures
 - Student must demonstrate competence

*See the MRI Student Competency Evaluation Form for specific details regarding what students must demonstrate independently to complete a scan for competency completion verification.

MRI Clinical Time Sheet

Student Name _____ Academic Semester/Year _____

Week of _____

Clinical Site _____

Day	Date	Time In	Technologi st's Initials	Time Out	Total Hours	Technolo gist's	Lunch	Sent Home
			st s miniais	Out	nours	Initials		Early
Monday							Yes No minutes	Yes No
Tuesday							Yes No minutes	Yes No
Wednesday							Yes No minutes	Yes No
Thursday							Yes No minutes	Yes No
Friday							Yes No minutes	Yes No
Saturday							Yes No minutes	Yes No
TOTAL								

STUDENT LEAVE AUTHORIZATION ATTACHED? YES NO

Technologist's signature _____

Student's signature

By signing this, I verify the time listed is the actual time I was there.

STUDENT LEAVE AUTHORIZATION

NAME _____

TODAY'S DATE ______ EFFECTIVE DATE _____

Leave of absence for _____ hours

Reason for Absence:

Time will be made up by:

	TEC	NG
Additional Documentation attached:	YES	NO

STUDENT'S SIGNATURE

PROGRAM OFFICIAL'S SIGNATURE

Magnetic Resonance Imaging Clinical Experience Requirement Procedures Verification Form

Category & Procedure	Date	Time	Facility Name	Technologis
	Performed			t Initials
Routine Brain - M				
Routine Brain				
Internal Auditory Canal-M				
Internal Auditory Canal				
Internal Auditory Canal				
Internal Auditory Canal				
Internal Auditory Canal				
Orbits - E				
Orbits				
Pituitary - M				
Pituitary				

*EXAMPLE Only – Official Verification Form can be found on Canvas. <u>A</u> printed copy of all necessary forms will be issued out at the beginning of the semester. Student: _____ Scan Competency: _____

Clinical Rotation: _____ Date: _____

Supervising Technologist: _____

Acceptable	Not Acceptable	N/A

Patient Care Skills

- Evaluation of requisition or medical record
- Patient identification
- Documentation of patient history (including allergies)
- Safety Screening
- Patient care and assessment
- Explanation of procedure
- Preparation of examination room
- Standard Precautions
- Preparation and/or administration of contrast
- Appropriate MRI safety procedures
- Patient discharge with post-procedure instructions

Technical and Procedural Skills

• Selection of imaging coils

Acceptable	Not Acceptable	N/A

- Patient positioning
- Protocol selection
- Parameter selection
- Image display
- Networking
- Archiving
- Post-processing
- Documentation of procedure/patient data in appropriate records

• Completion of acquisition

Evaluation Skills

Acceptable	Not Acceptable	N/A

- Analysis of the image for technical quality
- Demonstration of correct anatomic regions
- Proper identification on images and patient data
- Recognition of relevant pathology
- Exam completeness

Is the student capable in performing this examination without direct assistance?

 $\Box \ YES \ \Box \ NO$

_____ Supervising Technologist Signature

_____ Student Technologist

AMIT Office Fax - 513-558-4009

MRI Clinical Evaluation Report

 Student name
 Date

 Clinical site
 Semester/Year

Technologist _____

Please evaluate the University of Cincinnati MRI students on the following with 1 being poor, 2 being average, 3 being good, and 4 being excellent. <u>Please grade the student on where they should be based on how far they are in the program.</u>

Answer Scale: Que

Question:

1	2	3	4	N/ A	1. Does the student dress appropriately and according to UC's uniform policy? Is the student punctual?
1	2	3	4	N/	2. Does the student get along well with staff/communicate well with physicians?
1	2	3	4	A N/	3. Does the student take constructive criticism well?
1	2	3	4	A N/	4. Does the student seek guidance about things he/she doesn't understand?
				Α	
1	2	3	4	N/ A	5. Does the student display or express enthusiasm to learn?
1	2	3	4	N/ A	6. Does the student show initiative (i.e., bringing patients to MR, screening patients, setting up exams, running scans, either with assistance or on their own?)
1	2	3	4	N/	7. Does the student assist in stocking scan room and help in maintaining the
1	2	3	4	A N/	equipment? 8. Does the student select the correct coils, protocols, sequences, and parameters
1	2	3	4	A N/	for the exam? 9. Is the student interested in helping with exams?
	_	3		Α	
1	2	3	4	N/ A	10. Does the student properly evaluate the requisition and/or medical records?
1	2	3	4	N/ A	11. Does the student obtain necessary information before beginning an exam with regard to patient history/MR screening/patient ID?
1	2	3	4	N/	12. Does the student explain the procedure to patients prior to scan?
1	2	3	4	A N/	13. Does the student demonstrate appropriate knowledge in image display, filming,
		-	-	Α	and archiving?
1	2	3	4	N/ A	14. Does the student employ proper MRI safety procedures and precautions?
1	2	3	4	N/ A	15. Does the student employ Universal Precautions when necessary?
1	2	3	4	N/ A	16. Does the student evaluate the resulting images for image quality?
1	2	3	4	N/	17. Does the student evaluate the resulting images for optimal demonstration of
1	2	3	4	A N/	anatomic region? 18. Does the student evaluate the resulting images for proper identification on
1	2	3	4	A N/	images and patient data?19. Does the student evaluate the resulting images for exam completeness?
	_	-		А	
1	2	3	4	N/ A	20. Does the student assist the patient in dressing/undressing/help onto MR scanner table as necessary?
1	2	3	4	N/ A	21. Does student prepare scan room and position the patient properly?
1	2	3	4	N/	22. Does the student show technical proficiency?
1	2	3	4	A N/	23. Does the student show technical knowledge?
1	2	3	4	A N/	24. Does the student talk to the patient during the exam, letting them know of the
				А	scanner noises and directions (i.e., "please hold still", "noise for 4 minutes", "How are you doing? etc.)
1	2	3	4	N/	25. Is the student discreet about asking the technologist questions in front of the
1	2	3	4	A N/	patient? 26. Does the student explain the procedure to the patient to make the patient more
1	2	3	4	A N/	comfortable? 27. Does the student refrain from inappropriate patient communication?
		_		А	
1	2	3	4	N/ A	28. Is the student courteous to patients?
1	2	3	4	N/ A	29. Does the student make good use of his/her time?
1	2	3	4	N/	30. The student can analyze the need to modify standard procedures and technical
		1		А	factors to accommodate patient conditions and other variables.

AMIT Office Fax - 513-558-4009

What are the strengths of this student?

_

Areas for improvement?

Any other comments?

Technologist signature _____

Date_____

Student Evaluation of MRI Clinical Site & Clinical Preceptor

Student's Name _____

Semester & Year _____

Clinical Site _____ Clinical Preceptor _____

This form is confidential and is intended to enhance the clinical experience for future MRI students. Your honest input is appreciated.

<u>Clinical Site Evaluation</u>

Please evaluate your MRI clinical site on the following categories/questions.

Responses: Strongly Disagree=1, Disagree=2, Neither Agree Nor Disagree=3, Agree=4,

Strongly Agree=5, N/A

Answer Scale:

Question:

1	2	3	4	5	N/	1. The pace of the site enhanced my learning experience.
					A	
1	2	3	4	5	N/	2. The organization of the MRI department allowed for optimal learning
					А	experiences during your rotation.
1	2	3	4	5	N/	3. The expectations of you were well outlined and communicated early on
					Α	during your rotation.
1	2	3	4	5	N/	4. Were you comfortable with the level of responsibility you had during your
					А	rotation.
1	2	3	4	5	N/	5. The technologist-student relationships enhanced my learning experience.
					А	
1	2	3	4	5	N/	6. The technologist(s) were helpful.
					А	
1	2	3	4	5	N/	7. The physician(s) were helpful.
					А	

1	2	3	4	5	N/ A	8. Do you feel that as a result of this rotation you have developed professionally?
1	2	3	4	5	N/ A	9. Do you feel that your professional objectives were met during your rotation?
1	2	3	4	5	N/ A	10. How likely would you be to recommend this site to other students?

Do you have any additional comments or feedback regarding your rotation?

<u>Clinical Preceptor Evaluation</u>

Please evaluate your MRI clinical preceptor on the following categories/questions.

Responses: Strongly Disagree=1, Disagree=2, Neither Agree Nor Disagree=3, Agree=4,

Strongly Agree=5, N/A

Answer Scale:

Question:

1	2	3	4	5	N/ A	1. Does the preceptor allow for optimal learning experiences during your rotation?
1	2	3	4	5	N/ A	2. Does the preceptor provide feedback/constructive criticism regarding your performance?
1	2	3	4	5	N/ A	3. Does the preceptor communicate your expectations well?
1	2	3	4	5	N/ A	4. Does the preceptor oversee your clinical experience during your rotation (daily and/or weekly)?
1	2	3	4	5	N/ A	5. Does the preceptor make themselves available to help you when needed?
1	2	3	4	5	N/ A	6. Does the preceptor display or express enthusiasm to have you as a student?
1	2	3	4	5	N/ A	7. Does the preceptor answer your questions carefully and with patience?
1	2	3	4	5	N/ A	8. Does the preceptor act approachable and responsive when you have questions?
1	2	3	4	5	N/ A	9. Does the preceptor use explanations that are clear and understandable?
1	2	3	4	5	N/ A	10. Does the preceptor encourage you to ask questions and participate in all aspects of MRI patient care and scanning?

Do you have any additional comments or feedback regarding your preceptor?

MRI Clinical Uniform:

- 1. Solid color scrub top/bottom combination.
- 2. White lab coat (for Nuclear Medicine it needs to be long sleeved and down to mid-thigh). You can buy one for all modalities. For MRI, it needs to be mid-thigh or shorter, long or short sleeved is fine.
- 3. Shoes should be either white nursing shoes or **all white** gym shoes with white laces worn only for clinical rotations. (Nuclear Medicine requires closed toe and heel). No crocs are allowed.
- 4. Socks should be white.
- 5. No jackets or sweatshirts will be permitted during clinical hours unless they are scrub jackets.
- 6. Name badge should be worn at all times.
- 7. No unusual hair colors or styles.
- 8. Tattoos are permitted; however, tattoos that contain inappropriate language, inappropriate symbols, or symbols or phrases that may be offensive to any segment of our associate or patient population are not permitted. In these circumstances, the tattoos will be required to be covered. Facial tattoos are not permitted.
- 9. No earrings are allowed during MRI clinical rotations, unless approved by clinical site. Please check with your clinical site supervisor and let me know if they approve of the wearing of earrings. Otherwise, do not wear them some earrings are ferrous, and thus should be avoided.
- 10. Conservative face makeup.
- 11. Only rings permitted are wedding rings.
- 12. No artificial fingernails. Nails must be free of polish, or polish must be free of chips.
- 13. No perfume or aftershave is to be worn.
- 14. Beards and mustaches must be well groomed and clean.
- 15. No necklaces or bracelets.
- 16. No sunglasses are permitted.
- 17. No head coverings of any type unless dictated by your religion and approved by the instructor.
- 18. No bobby pins or hair clips.

** Additions to this policy may be made at the discretion of the instructor as situations arise.

Clinical Competencies

Nuclear Medicine Technology Didactic and Clinical Competency Requirements

Nuclear Medicine Scope of Practice

The spectrum of responsibilities for a nuclear medicine technologist varies widely across the United States. Practice components presented in this document provide a basis for establishing the areas of knowledge and performance for the nuclear medicine technologist. The nuclear medicine technologist must be in compliance with all federal, state, and institutional guidelines, including proper documentation of initial and continued competency in those practices and activities.

Continuing education is a necessary component in maintaining the skills required to perform all duties and tasks of the nuclear medicine technologist in this ever-evolving field.

The Nuclear Medicine Technologist Scope of Practice and Performance Standards document is intended to set forth the standards in important areas of the nuclear medicine technologist's responsibilities. It may not cover all areas which may present themselves in actual

practice. These standards do not supersede the judgment of the individual nuclear medicine technologist and other healthcare professionals serving the patient in light of all of the facts of the individual case. THE SOCIETY OF NUCLEAR MEDICINE AND MOLECULAR IMAGING AND THE SOCIETY OF NUCLEAR MEDICINE AND MOLECULAR IMAGING TECHNOLOGIST SECTION DISCLAIM ALL LIABILITY ARISING FROM USE OF THESE DOCUMENTS.

<u>NMT Scope of Practice and Performance Standards</u> - Approved May 2020

Nuclear Medicine Program Technology Outcomes & Goals

- The NMT curriculum will strive for a 100% retention rate of its nuclear medicine technology students.
- Students who complete the NMT curriculum will pass the NMTCB or ARRT nuclear medicine technology exam on their first attempt at a rate that exceeds national averages.
- Students who complete the NMT curriculum will either continue their education in MRI or find employment within 12 months of graduation.
- Graduates will be satisfied with their program of study.
- Graduates are prepared for entry-level work in nuclear medicine technology.

NMT Student Learning Objectives

- 1. Graduates will possess the oral and written communication skills for advanced and leadership roles.
- 2. Graduates will understand the processes for contributing to the knowledge base of the professional community.
- 3. Graduates will demonstrate professionalism and compassion in the clinical setting.
- 4. Graduates will perform imaging procedures according to program and/or departmental protocol integrating scientific knowledge and patient care skills.
- 5. Graduates will demonstrate knowledge of anatomy and physiological function of specific organs or organ systems.
- 6. Graduates will be cognizant of the effects of radiation and the methods utilized to reduce radiation exposure.
- 7. Graduates will be capable of performing quality assurance procedures on the various imaging, counting, and measuring instruments. Knowledge base will include the mechanics of nuclear medicine instrumentation.
- 8. Graduates will be proficient and/or knowledgeable of the imaging procedures likely to be encountered by recent graduates in the clinical setting.

Nuclear Medicine Student Clinical Site Orientation Checklist

This form is to be completed by the Supervising Technologist on the first day of clinical rotation to ensure each Nuclear Medicine student technologist has been formally orientated on the items listed below.

Upon completion, the student technologist will submit this form to Nuclear Medicine clinical coordinator. This form must be completed and submitted by the second week of each rotation or the student's rotations will be suspended until completed.

- HIPAA training
- Emergency Overhead Code training
- Cardiac/Respiratory Code training and procedures (including crash cart location)
- Fire safety and procedures
- Electrical hazard procedures
- Evacuation procedures
- Chemical spill/hazard procedures
- RAM spill procedures (including location of cleanup materials)
- RAM storage & waste locations
- Standard precautions
- Venipuncture (including location of supplies, sharps containers & syringe shields)
- Protocol book

_____ Clinical Site

_____ Supervising Technologist (Print & Signature)

_____ Student Technologist Signature (Print & Signature)

DATE

Nuclear	Medicine	Clinical	Time She	et
Tucical	Witcuitint	Chincar	I mic Bit	ιı

Student Name _____ Academic Semester/Year _____

Week of _____

Clinical Site _____

Day	Date	Time In	Technolo gist's Initials	Time Out	Total Hours	Technolo gist's Initials	Lunch	Sent Home Early
Monday							Yes No minutes	Yes No
Tuesday							Yes No minutes	Yes No
Wednesday							Yes No minutes	Yes No
Thursday							Yes No minutes	Yes No
Friday							Yes No minutes	Yes No
Saturday							Yes No minutes	Yes No
TOTAL								

STUDENT LEAVE AUTHORIZATION ATTACHED? YES NO

Technologist's signature _____

Student's signature _____

By signing this, I verify the time listed is the actual time I was there.

STUDENT LEAVE AUTHORIZATION

NAME
TODAY'S DATE EFFECTIVE DATE
Leave of absence for hours
Reason for Absence:
Time will be made up by:
Additional Documentation attached: YES NO

STUDENT'S SIGNATURE

PROGRAM OFFICIAL'S SIGNATURE

Nuclear Medicine Technology

Introduction

Candidates for Certification or Registration are required to meet the professional education requirements of the American Registry of Radiologic Technologists – Nuclear Medicine Technology (ARRT) and the Nuclear Medicine Technology Certification Board (NMTCB).

The requirements are updated by the ARRT and NMTCB approximately every five years through a practice/task analysis. These organizations are independent and conduct their analyses on their own timelines.

The following requirements are adopted from the ARRT and the NMTCB and comprise the Nuclear Medicine Technology Program Competency Requirements. All must be completed satisfactorily before students can progress further. Students who do not complete all competencies have not satisfied program requirements and will receive a grade of "I" or "F" (at the Instructor's discretion) in Directed Practice III. Students earning an "I" or "F" will not be eligible for board examination, program advancement or graduation.

The purpose of clinical competency requirements is to verify examinees have demonstrated the competencies that a new graduate can realistically expect to encounter in their day-to-day duties as an entry-level nuclear medicine technologist. Demonstration of a clinical competency means the student is able to perform the procedure from beginning to end independently while under supervision.

A number of procedures will be designated as (Elective/Simulated/Observed – E/S/O). The reason for this is that some procedures are performed infrequently and the student may not have enough opportunities to perform the procedure independently from beginning to end.

For simulation, the student must simulate the procedure in a realistic manner. Examples of acceptable simulation would include CPR on a mannequin, demonstrating proper aseptic technique on another person by performing the venipuncture on a mannequin, or administering a non-radioactive drink to someone simulating a thyroid therapy and then scanning an actual patient.

Observations will only be considered acceptable under the most extreme of circumstances and students should strive to have NO procedures completed in this manner. To fulfill the criteria of observation, students must observe the entire procedure from beginning to end and participate in some of the administration and imaging. It will be the sole discretion of the clinical preceptor to determine if the student understands the procedure as well as needed by an entry-level technologist.

Each procedure completed (actual, simulated, observed) may only be counted once. For example, a SPECT brain scan performed on a patient for brain death can either be counted as a brain death OR a SPECT brain, not both. Additional opportunities to complete elective procedures may be available within the classroom via journals, case studies and/or assignment completion.

Patient Care Procedures	Date Completed	Competence Verified By
*All 6 Required CPR Certified	Completed	vermed by
Vital Signs – Blood Pressure		
Vital Signs - Pulse		
Vital Signs - Respiration		
Venipuncture		
Assisted Patient Transfer (e.g., Slider Board, Mechanical Lift, Gait Belt)		
ECG (e.g. Lead Placement and Recognition of Common Dysrhythmias)		

Patient Care Procedures

Maintain and Care for Patient Ancillary Equipment (e.g.,	
Pump, Collection Bag, Oxygen Delivery)	

Quality Control Procedures

Quality Control Procedures *All 5 Required	Date Completed	Competence Verified By
SPECT Gamma Camera		j
(Uniformity, Resolution, and Center of Rotation)		
Dose Calibrator		
(Constancy, Linearity, Accuracy & Geometry)		
Well Counter/Uptake Probe		
(Energy Calibration)		
Survey Meter		
(Battery Check, Constancy, Operation, Components &		
QC)		
PET or PET/CT		
(Reference or Blank Scan, Normalization, 2D-3D Well		
Counter)		

Please note that this list is currently under review and is being revised to conform with best professional organizations requirements and a final list will be provided to the students before the commencement of clinical rotations.

Nuclear Medicine Procedures(E/S/O) = Elective/Simulated/Observed	Date Completed	Patient, Simulated, Observed	Competence Verified By
Infection			
WBC Imaging			
Other (e.g., Ga-67 citrate, F-18 FDG			
Bone (Skeletal)			
Planar/Static			
Three Phase			
Total/Whole Body			
NaF PET			
Cardiovascular			
Amyloid ImagingGated Blood Pool Study -			
MUGA			
Gated Blood Pool Myocardial Perfusion			
Stress/Rest			
Myocardial Perfusion StressGated (E/S/O)			

Myocardial Perfusion RestCardiac PET or PET/CT (E/S/O)			
Cardiac SPECT or SPECT/CT			
Cardiac MIBG			
Gated cardiac blood pool Cardiac MIBG			
(E/S/O)			
Cardiac Viability with FDG Cardiac Amyloid			
Imaging (E/S/O)			
Cardiac Viability with FDG Cardia			
PET(E/S/O)			
Central Nervous System Brain Planar or SPECT			
Brain or Brain Death Flow/Dynamic or SPECT			
Dati Scan (E/S/O)			
Cisternography – Routine (Injection may be S/O)			
Cisternography – CSF Leak (E/S/O)			
Shunt Patency (E/S/O)			
Brain PET or PET/CT (E/S/O)			
¹⁸ F florbetaben, florbetapir, flutemetamol			
CT Imaging Procedures			
Attenuation Correction/Anatomical Loc.			
Diagnostic CT (E/S/O)			
Endocrine/Exocrine			
Adrenal Scan (E/S/O)			
Thyroid Uptake			
Thyroid Scan			
Thyroid Metastatic Survey			
Parathyroid – Planar or SPECT			
Hematopoietic			
Bone Marrow Imaging (E/S/O)			
Nuclear Medicine Procedures	Date	Patient,	Competence
(E/S/O) = Elective/Simulated/Observed	Completed	Simulated, Observed	Verified By
Gastrointestinal			
Hepatobiliary without GBEF			
Hepatobiliary with GBEF			
Gastroesophageal Reflux			
Gastric Emptying (Solid or Liquid)			
GI Bleeding			
Meckel's Diverticulum (E/S/O)			
Liver/Spleen Planar or SPECT			
Damaged RBC Spleen (E/S/O)			
Peritoneal Shunt Patency (E/S/O)			
	•	•	•

Y-90 Liver-Lung Shunt Mapping (E/S/O)	
Hemangioma (E/S/O)	
Genitourinary	
Renogram without Lasix	
Renogram with Lasix	
Renogram Captopril (E/S/O)	
Renal Cortical Planar or SPECT (E/S/O)	
Effective Renal Plasma Flow (E/S/O)	
Glomerular Filtration Rate (E/S/O)	
Radionuclide Cystogram (E/S/O)	
Respiratory	
Perfusion	
Ventilation Aerosol (E/S/O)	
Quantitative VQ	
Therapeutic Procedures	
Thyroid Ablation (E/S/O)	
Thyroid Hyperthyroidism (E/S/O)	
Palliative Bone (E/S/O)	
Monoclonal Antibody (E/S/O)	
Embolic Radiation Therapy (SIRT)(E/S/O)	
Tumor	
Gallium Planar or SPECT (E/S/O)	
Lymphoscintigraphy (Injection S/O)	
Monoclonal Antibody (MAB) (E/S/O)	
Peptide Imaging (E/S/O)	
Neuroendocrine Imaging - MIBG	
Neuroendocrine Imaging - OctreoscanGa-	
68 DOTATATE	
Breast Imaging (E/S/O)	
Tumor SPECTPET/CT imaging F-18	
PET or PET/CT F18	
PET or PET/CT Ga-68 (E/S/O)	

WRITE UP FOR NUCLEAR MEDICINE PROCEDURES

THIS FORM IS TO BE COMPLETED BY THE STUDENT AND GIVEN TO PROGRAM OFFICIALS. USE THE BACK OF THIS PAGE IF NECESSARY. DO NOT INCLUDE ANY PATIENT NAMES OR NUMBERS THAT MAY BE LINKED TO A SPECIFIC PATIENT.

Student:	nt: Study:						
Location:		Superv	vising Technologis	t/Faculty:			
Select One:	Patient	Simulated	Observed	Journal	In-Class		

- Relevant Patient Information (e.g. Reason for admission, diagnosis, age. Is patient deaf, blind, obese, paralyzed, comatose, etc.?):
- 2. What is the clinical question?
- 3. What are the isotopes utilized and how are they administered? Are there alternative radiopharmaceuticals available that would yield the same or similar information? Why were these not used?
- 4. Is there any special patient prep (i.e., hydration, NPO, etc.?).
- 5. Describe techniques used for scanning and why (e.g., was patient supine, upright, inclined, imaging time, delay time, images acquired, etc.).
- 6. Acquisition parameters utilized on the camera and computer (camera position, matrix, zoom, imaging time, etc.):

7. Critique the technical outcome of scan and why it appeared as such (e.g. were the pictures ideal or could something been done to make them better, was the quality compromised by the patient's condition, etc.). If possible, please provide a brief clinical outcome of the scan.

NUCLEAR MEDICINE TECHNOLOGY

STUDENT PERFORMANCE EVALUATION

Student: ______ Study:_____

Location: ______ Supervising Technologist/Faculty: _____

	Performance Skills	Acceptable	Simulated	Observed	Write- Up	N/A
1	Check requisition/order					
2	Patient interaction (explain test, reassure patient)					
3	Signed pregnancy/nursing statement (if applicable)					
4	Patient history noted/obtained					
5	Prepare radiopharmaceutical kit (if applicable)					

6	Calibrate and log radiopharmaceutical			
7	Set up gamma camera and/or other instrumentation			
8	Set up computer/Select correct acquisition			
9	Patient identification (2 means)			
10	Administer radiopharmaceutical by appropriate route			
11	Position patient			
12	Image patient			
13	Organization of procedure			
14	Check images and take/suggest additional views if necessary			
15	Post process images (if applicable)			
16	Check images with physician (if applicable)			
17	Give patient post-image instructions			
18	Clean up area			

	Educational Performance	Acceptable	Simulated	Observed	Write- Up	N/A
1	Student performs all stated objectives without instruction from senior technologist (attitudinal consideration)					
2	Student applies basic understanding and reasoning in performance of all stated objectives (cognitive consideration)					
3	Student demonstrates coordination and efficiency associated with the physical performance of all stated objectives (psychomotor consideration)					

SIGNATURES

_STAFF TECHNOLOGIST

__STUDENT TECHNOLOGIST

*All students completing competencies at a clinical affiliate with a patient must perform the imaging/therapy protocols independently and meet 'acceptable' standards as seen fit by the institution, supervising technologist and NTMCB and ARRT standards.

*Simulation and Observation competency completions must be directly supervised by a technologist and meet 'acceptable' standards as seen fit by the institution, supervising technologist and NTMCB and ARRT standards.

*Write-up, case study and journal competency completions must be reviewed by the program director or clinical coordinator and meet 'acceptable' standards as seen fit by the institution, supervising technologist and NTMCB and ARRT standards.

*Students must include image examples for simulations, case study and journal write-ups.

TECHNOLOGIST/FACULTY GUIDELINES FOR STUDENT EVALUATIONS

Student Evaluations are divided into eight general categories. They are as follows:

Initiative	Professional Demeanor
Attitude	Interest
Patient Rapport	Technical Proficiency
Technical Knowledge	Staff Rapport

The numbers 0-4 will be used to evaluate the student's performance in each one of the categories. The meaning associated with these numbers are as follows:

4 = **EXCELLENT** The student performs in a clearly superior manner. This person is on track to become a superior technologist.

3 = **GOOD** The student is a solid and dependable performer. They continuously strive to do the right thing. This person is on track to become a versatile and dependable technologist.

2 = AVERAGE This student is usually reliable. Although they possess only a few negative characteristics they likewise possess only a few positive characteristics. This individual is on track to become a dependable and predictable technologist.

1 = POOR This person is not likely to hurt anyone, however, their current clinical performance leads you to believe that

they will not make a trustworthy and competent technologist without significant improvement.

- 0 = DEFICIENT This student either has no concept of what is going on (considering the amount of time they have been in the program) or does not perform what is expected (i.e. procedures, conduct, etc.) Their actions lead you to believe that they may hurt a patient due to ineptitude. Without drastic improvement, this person will not make it as a technologist.
- = UNABLE TO RATE This student has not been observed enough in this category to detect any trends.

At the end of the semester, an average is calculated from all sheets for the semester and this makes up most of the grade the student will receive for the course Directed Practice. The results of the evaluations are shared with the students but the technologist has the option of remaining anonymous. Signatures are requested to document authenticity.

Letter grades are determined as follows:

Grade	Numerical Value	Grade	Numerical Value
А	3.75 - 4.00	С	2.25 - 2.49
A-	3.50 - 3.74	C-	2.0 - 2.24
B+	3.25 - 3.49	D+	1.75 - 1.99
В	3.00 - 3.24	D	1.50 - 1.74
B-	2.75 - 2.99	D-	1.25 - 1.49
C+	2.50 - 2.74	F	1.00 - 1.24

ANY STUDENT RECEIVING AN END OF SEMESTER GRADE BELOW 2.00 (letter grade of C) IN DIRECTED PRACTICE OR TECHNICAL EVALUATION MAY POSE A RISK TO THE SAFETY AND WELL-BEING OF OTHERS AND WILL BE IMMEDIATELY DISMISSED FROM THE PROGRAM.

CLINICAL EVALUATION REPORT Advanced Medical Imaging Technology Program

AMIT Office Fax - 513-558-4009

Student	_
---------	---

Faculty/Staff _____

Clinical Rotation	
-------------------	--

Days absent _____

Procedure performed (list by type, instrument, and/or location)

RATING BY NUMBER:

4 = EXCELLENT 3 = GOOD 2 = AVERAGE 1 = POOR 0 = DEFICIENT (N/A) = UNABLE TO RATE

See reverse for considerations to be taken in rating student technologists

TO BE COMPLETED BY THE SUPERVISING FACULTY/STAFF

SKILL AREA	RATING	COMMENTS
Initiative		
Professional Demeanor		
Attitude		
Interest		
Patient Rapport		
Technical Proficiency		
Technical Knowledge		
Staff Rapport		

Additional Comments

Signature _____

FACTORS FOR CONSIDERATION

Initiative - Does the student

- 1. Determine goal of study prior to its performance?
- 2. Prepare camera for acquisition ahead of time?
- 3. Clean and supply work area?
- 4. Take initiative in performing imaging procedures?
- 5. Check images with M.D. without prompting?
- 6. Possess genuine interest in maintaining workflow?
- 7. Attempt difficult or unfamiliar procedures with help rather than refuse to try?
- 8. Experiment with new techniques when time permits?

Professional Demeanor - Does the student

- 1. Exhibit ethical, mature, and professional conduct?
- 2. Adhere to departmental policies (i.e., dress code, fire and emergency, radiation safety, misadministration, etc.?)
- 3. Respectfully address physicians, administrators and other superiors?
- 4. Refrain from speaking in derogatory terms of patients, M.D.'s, fellow students, or technologists?
- 5. Focus their conversations on the patient?

Attitude - Does the student

- 1. Take responsibility for their education?
- 2. Demonstrate patience and maturity when working with difficult patients?
- 3. Follow through on written or verbal orders?
- 4. Possess a pleasant disposition?

- 5. Gracefully accept suggestions from superiors and fellow students?
- 6. Arrive punctually to rotation?
- 7. Take only allotted time for lunch?

Interest - Does the student

- 1. Stay late or come in early when situation warrants it?
- 2. Find out additional background information when warranted?
- 3. Willingly help out on projects or anything else that needs to be done?
- 4. Have good attendance while on rotation (excluding personal time or reasonable use of sick time)?
- 5. Remain accountable to assigned rotation/technologist?
- 6. Express curiosity or ask questions?

Patient Rapport - Does the student

- 1. Introduce self to patient?
- 2. Correlate patient's identification with requisition?
- 3. Explain exam clearly to patient on terms that patient understands?
- 4. Tactfully determine that female patients of childbearing years are neither pregnant nor nursing prior to administering activity?
- 5. Anticipate patient's needs and assists them as necessary?
- 6. Insure patient's privacy and modesty?
- 7. Use safety devices (i.e., side rails, brakes, restraints, etc.?) appropriately and correctly?
- 8. Frequently inquire into patient's comfort?
- 9. Adequately reassure nervous patients?
- 10. Position comatose and immobile patients as gently as alert patients?
- 11. Show patience toward combative, uncooperative and/or incoherent patients?

Technical Proficiency - Does the student

- 1. Readily learn new procedures?
- 2. Easily relearn or correct techniques that they have learned incorrectly?
- 3. Readily repeat views when quality is in doubt?
- 4. Make an effort to get the highest quality images within the available time constraints?
- 5. Apply classroom information to their working environment?
- 6. Demonstrate self confidence in their ability?
- 7. Adjust procedures to the individual patient and their needs?
- 8. Continuously strive to produce high quality work?

Technical Knowledge - Does the student

- 1. Always wears gloves, lab coats, and film badges when handling radioactive material?
- 2. Apply concepts of time, distance, and shielding to reduce radiation exposure?
- 3. Correctly set up and peaks camera?
- 4. Correctly set up and play back computer acquisitions?
- 5. Know procedures, radiopharmaceuticals, and activity ranges?
- 6. Label films properly?
- 7. Know contraindications for studies?
- 8. Know order of sequential studies?
- 9. Correct their own mistakes?

Staff Rapport - Does the student

- 1. Assist assigned technologist without prompting?
- 2. Attentively listen to technologist's explanation of procedures?
- 3. Anticipate equipment/computer/camera needs and handles the situation without prompting?
- 4. Communicate effectively with technologists and physicians and is able to answer their questions or perform their instructions

Student Evaluation of Nuclear Medicine Clinical Site & Clinical Preceptor

Student's Name _____

Semester & Year _____

Clinical Site _____

Clinical Preceptor _____

This form is <u>confidential</u> and is intended to enhance the clinical experience for future Nuclear Medicine students. Your honest input is appreciated.

Clinical Site Evaluation

Please evaluate your MRI clinical site on the following categories/questions.

Responses: Strongly Disagree=1, Disagree=2, Neither Agree Nor Disagree=3, Agree=4,

Strongly Agree=5, N/A

Answer Scale:

Question:

1	2	3	4	5	N/ A	1. The pace of the site enhanced my learning experience.
1	2	3	4	5	N/ A	 The organization of the Nuclear Medicine department allowed for optimal learning experiences during your rotation.
1	2	3	4	5	N/ A	 The expectations of you were well outlined and communicated early on during your rotation.
1	2	3	4	5	N/ A	4. Were you comfortable with the level of responsibility you had during your rotation.
1	2	3	4	5	N/ A	5. The technologist-student relationships enhanced my learning experience.
1	2	3	4	5	N/ A	6. The technologist(s) were helpful.
1	2	3	4	5	N/ A	7. The physician(s) were helpful.
1	2	3	4	5	N/ A	8. Do you feel that as a result of this rotation you have developed professionally?
1	2	3	4	5	N/ A	9. Do you feel that your professional objectives were met during your rotation?
1	2	3	4	5	N/ A	10. How likely would you be to recommend this site to other students?

Do you have any additional comments or feedback regarding your rotation?

<u>Clinical Preceptor Evaluation</u>

Please evaluate your Nuclear Medicine clinical preceptor on the following categories/questions. Responses: Strongly Disagree=1, Disagree=2, Neither Agree Nor Disagree=3, Agree=4,

Strongly Agree=5, N/A

Answer Scale:

Question:

-				-	-	
1	2	3	4	5	N/	1. Does the preceptor allow for optimal learning experiences during your
					Α	rotation?
1	2	3	4	5	N/	2. Does the preceptor provide feedback/constructive criticism regarding your
					А	performance?
1	2	3	4	5	N/	3. Does the preceptor communicate your expectations well?
					А	
1	2	3	4	5	N/	4. Does the preceptor oversee your clinical experience during your rotation (daily
					А	and/or weekly)?
1	2	3	4	5	N/	5. Does the preceptor make themselves available to help you when needed?
					А	
1	2	3	4	5	N/	6. Does the preceptor display or express enthusiasm to have you as a student?
					А	
1	2	3	4	5	N/	7. Does the preceptor answer your questions carefully and with patience?
					А	
1	2	3	4	5	N/	8. Does the preceptor act approachable and responsive when you have questions?
					А	
1	2	3	4	5	N/	9. Does the preceptor use explanations that are clear and understandable?
					А	
1	2	3	4	5	N/	10. Does the preceptor encourage you to ask questions and participate in all aspects
					Α	of MRI patient care and scanning?

Do you have any additional comments or feedback regarding your preceptor?

Student Contract

Advanced Medical Imaging Technology Program

I have read the Advanced Medical Imaging Technology Student Handbook, the University of Cincinnati Student Code of Conduct, and the professional codes of conduct and ethics. I agree to the rules, regulations and standards set forth by the Advanced Medical Imaging Technology Program, the College of Allied Health Sciences, and the University of Cincinnati. I understand that failure to comply with Program, College, and University rules and regulations have a negative consequence and may include my expulsion from the program. Furthermore, I understand that failure to comply with professional codes of conduct and ethics may render me ineligible for nationally administered board examinations.

I understand that I must read and understand this document, the University of Cincinnati Student Code of Conduct, and the professional codes of conduct and ethics before I will be allowed to participate in my clinical education. Faculty will answer questions I have regarding their content.

Furthermore, I agree to be timely for class and clinical rotations, will do what is asked of me to the best of my abilities, and I will take charge of both my clinical and classroom education. This includes but is not limited to making sure correct grades are submitted for each course, courses needed for graduation are completed with the grades submitted to the Registrar's Office, and proper paperwork is submitted in a timely manner.

I will prepare myself to the best of my abilities for the nationally administered board examinations of the modalities I have chosen/been assigned. I will complete all tasks necessary to obtain board eligibility in each modality I pursue.

I agree to abide by the AMIT Program's Integrity Policy. While the following list is not comprehensive, certain behaviors are unacceptable and it is important that it is clear that the following activities may result in one's immediate dismissal from the program. You need to place your initials indicating you have read and understand each individual statement.

- _____ Obtaining answers/solutions on journals, homework, clinical competencies, quizzes, exams or other assignments from other students.
- _____ Bullying, coercing, harassing, or making unreasonable demands of other students.
- Beginning quizzes or examinations at any time other than the time one is supposed to begin the assignment.
- Using notes, PowerPoints, classmates or other sources of information to complete a test, quiz, or assignment unless it is permitted to do so.

- Manufacturing, distribution, selling, using, offering for sale, possessing, buying or attempting to buy or distribute and drug or narcotic in an illegal manner.
- Attending class or clinical rotations while under the influence of alcohol, illegal drugs, or narcotics. Legally prescribed drugs are acceptable when used in the manner prescribed by a licensed physician and the effects of the drugs do not impair the students' judgment or physical activities.
- Failure to comply with a university or affiliate official, security personnel, or law enforcement officer acting in the performance of their duty.
- Intentionally or unintentionally harming, threatening to harm, or intimidating university or affiliate personnel or fellow classmates.
- Intentionally or unintentionally harming, threatening to harm, or intimidating patients, their families or guests or fellow classmates.
- _____ Theft.
- Failure to show up in a timely and consistent manner for clinical rotations. No more than three late arrivals per semester are acceptable.
- _____ Leaving a clinical rotation early without permission.
- _____ Failing to comply with the rules, policies, and/or regulations of clinical affiliates.
- Fighting or quarreling with university or affiliate personnel, patients, or their families or guests.

Committing a crime (felony or misdemeanor) while on university or affiliate property. Committing a felony or misdemeanor at any location may result in the student permanently losing eligibility for board examination.

_____ Failing to maintain at least a 3.0 grade point average in the program.

____ Receiving any grade lower than a "C" in any professional curriculum course.

Either intentionally or unintentionally causing harm to occur to a patient, patient's guests, or fellow health care worker either through action, negligence, or omission of action.

_____ Falsifying or altering University, College, Program, and/or Affiliate documents (i.e., time sheets/cards, clinical competency forms, and evaluations).

_____ Plagiarism.

Maintain confidentiality of patient, classmate and university/clinical site personnel information (e.g., no gossip) and abide by all HIPAA regulations.

_____ Intentionally and/or repeatedly not adhering to pandemic rules and regulations of the University, Program, or Clinical Affiliate.

In return for my compliance to the rules and regulations set forth in this document, I understand that the faculty and staff of the Advanced Medical Imaging Technology Program will provide the training and education necessary to prepare oneself for the nationally administered board examinations.

My initials above and signature below affirms my complete understanding of this document and I agree to abide by the rules as set forth by this program.

Signature

Date

Print Name