

**UAB** SCHOOL OF  
HEALTH PROFESSIONS

The University of Alabama at Birmingham

**DEPARTMENT OF  
CLINICAL AND DIAGNOSTIC SCIENCES  
Nuclear Medicine Technology Program**

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**2020-2021  
STUDENT HANDBOOK**



**UAB SCHOOL OF HEALTH PROFESSIONS**

**DEPARTMENT OF**

**CLINICAL AND DIAGNOSTIC SCIENCES**

**Nuclear Medicine Technology Program**

**2020-2021 ACADEMIC HANDBOOK**



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7/12/2020

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## INTRODUCTION

### DEAN'S WELCOME MESSAGE

Welcome to the University of Alabama at Birmingham School of Health Professions, a national leader in the health care industry.

We are home to one of the largest health professions schools in the nation with more than 25 programs at the baccalaureate, master's, and doctoral levels, with over 2,000 undergraduate and graduate students enrolled.

This will not be the start you imagined, but this is a new start for everyone in health care and you are in the best place to begin your journey. Please know we are all committed to providing you a world-class education to support your relentless pursuit of knowledge and your strong desire to serve others.

The pandemic has challenged you in so many ways and you have demonstrated one of the most precious qualities one can have: resilience. You have seen and adjusted to so much. You have responded with determination. And you have taken the reality COVID-19 has thrown your way and moved forward with your education. That resilience has brought you here today and will continue to serve you well during your journey at UAB.

We understand that healthcare needs - even outside of a pandemic - are constantly changing. That is why we continue to add innovative programs such as Biotechnology. We also offer graduate programs you will only find in Alabama at UAB like Genetic Counseling, Nuclear Medicine Technology, Low Vision Rehabilitation, Healthcare Quality and Safety, Ph.D. in Rehabilitation Science, and Biomedical and Health Sciences, which can be completed within eleven months.

Our degrees and programs are fully accredited by their respective professional organizations. This means you will be eligible for licensure, national certification or registration and enjoy being in high demand within the job market. Our first-time student exam pass rate on many credentialing exams is an astounding 98 percent or higher.

Graduating from the School of Health Professions means you will acquire an esteemed degree, have a host of job opportunities in healthcare – an industry that continues to grow rapidly – and be well prepared to make a difference in your community.

Our alumni give advice to current students that is worth repeating: “learn your craft, be a better professional for your patients, be open minded to future possibilities, and remember to have a healthy work/ life balance”.

I look forward to seeing you grow in your respective field and watching you become the leader we know you can be.



Andrew J. Butler, PhD, FAPTA

## OVERVIEW OF THE SCHOOL OF HEALTH PROFESSIONS

A leader in federally funded research, the UAB School of Health Professions (SHP), is one of the largest academic institutions of its type in the United States and currently boasts several nationally ranked programs. What began in the 1950's as a collection of courses in various para-professional disciplines has grown into an internationally recognized center of academic excellence.

The SHP initially took shape in 1969 as UAB gained autonomy within the University of Alabama System. Originally christened the School of Community and Allied Health Resources (SCAHR), the school incorporated the School of Health Services Administration and the Division of Allied Health Sciences from the College of General Studies with parts of the Department of Public Health and Epidemiology from the medical school. An innovative facility designed to meet the growing needs of the health care industry, the SCAHR was divided into four academic divisions that functioned like regular academic departments: Health Services Administration, Public Health and Environment, Allied Health Sciences, and the Regional Technical Institute for Health Occupations.

Throughout the 1970's and 80's the school's offerings were amended to reflect the changing health care industry. As a result of the changes, SCAHR became the School of Public and Allied Health (SPAHE). Next it became the School of Community and Allied Health (SCAH) and later the School of Health Related Professions (SHRP). During this time, the school added several new areas of study including the consistently nationally ranked program in Nutrition Sciences. Through their visionary leadership and guidance, the school is experiencing unparalleled success.

Today, the School of Health Professions is comprised of more than 25 programs – at the baccalaureate, master's and doctoral levels – across five academic departments: Clinical and Diagnostic Sciences, Health Services Administration, Nutrition Sciences, Occupational Therapy, and Physical Therapy. The school is housed in three buildings, the Susan Mott Webb Nutrition Sciences Building, the Learning Resource Center Building, and the School of Health Professions Building (SHPB).

With more than 2,200 faculty, staff, and students, SHP is one of six schools comprising the world-renowned UAB Academic Health Center. Students have access to vast academic resources, state-of-the-art facilities, and progressive research.

SHP is proud of many accomplishments including:

- U.S. News & World Report ranks SHP programs in the nation's top 25
- Research funding is over \$14 million and growing
- The school is at the top of the list in research funding from the National Institutes of Health for schools of its type and has been either first or second in funding received since 1969

## OFFICE FOR STUDENT RECRUITMENT, ENGAGEMENT AND SUCCESS (OSRES)

The SHP Office for Student Recruitment, Engagement and Success (OSRES) supports UAB's mission and values with a focus on achievement, collaboration and diversity. It furthers the School of Health Professions' mission to be a leader shaping the future of healthcare by recruiting the best and brightest to SHP; developing students to impact the campus and communities; and graduating tomorrow's healthcare leaders. Guided by these commitments, the OSRES provides support to all students through a number of programs including the following:

- Academic Coaching
- Tutoring and Supplemental Instruction
- Campus Resource Referral
- Management of school-wide Scholarships in SHP

The OSRES also coordinates the School of Health Professions Student Affairs Committee (SAC.) SAC is responsible for student activities, services, programs, organizations, policies and procedures consistent with the university's non-academic conduct policies. Subcommittees of SAC include the following:

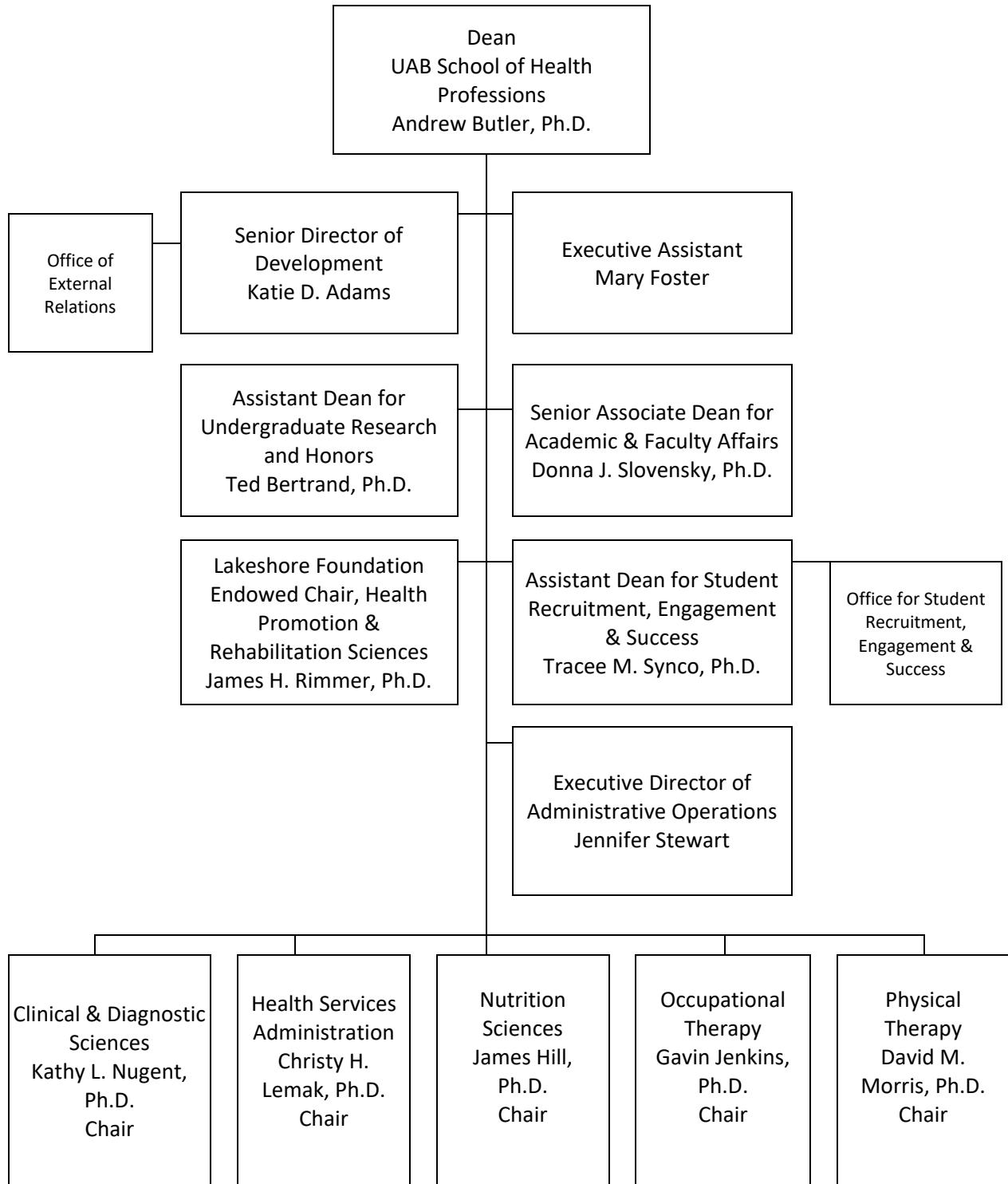
- Homecoming
- Orientation
- Student Activities
- Non Academic Misconduct/ Breaches in Professional Behaviors

Additionally, the OSRES team recognizes that with classes and labs, internships, and studying, students have particularly demanding schedules. In response, we bring resources to you and serve as liaison between SHP and university departments across student services.

The team at OSRES is here to support students. We have an open-door policy and encourage students to connect. Students should feel free to drop-by, no appointment needed; call, email or schedule a meeting. We are here to help students in the School of Health Professions make the most of their UAB experience.

**OSRES** - Location: SHPB 230 Telephone: 205-934-4195 or 205-934-4194 Email: [shp@uab.edu](mailto:shp@uab.edu)

**SCHOOL OF HEALTH PROFESSIONS ORGANIZATIONAL CHART - 2020-2021**





## SECTION 1 – SCHOOL AND UNIVERSITY INFORMATION

### ACADEMIC CALENDAR

All dates related to registration, payments of tuition and fees drop/add dates, other administrative requirements, and official school holidays are recorded on the UAB Academic Calendar available at [www.uab.edu/academiccalendar](http://www.uab.edu/academiccalendar).

### ACADEMIC HONOR CODE (UAB)

The University of Alabama at Birmingham expects all members of its academic community to function according to the highest ethical and professional standards. Students, faculty, and the administration of the institution must be involved to ensure this quality of academic conduct. Academic misconduct undermines the purpose of education. Such behavior is a serious violation of the trust that must exist among faculty and students for a university to nurture intellectual growth and development. Academic misconduct can generally be defined as all acts of dishonesty in an academic or related matter.

Academic dishonesty includes, but is not limited to, the following categories of behavior:

**ABETTING** is helping another student commit an act of academic dishonesty. Allowing someone to copy your quiz answers or use your work as their own are examples of abetting.

**CHEATING** is the unauthorized use or attempted use of unauthorized materials, information, study aids, the work of others, or computer-related information.

**PLAGIARISM** means claiming as your own the ideas, words, data, computer programs, creative compositions, artwork, etc., done by someone else. Examples include improper citation of referenced works, the use of commercially available scholarly papers, failure to cite sources, or copying another person's ideas.

**FABRICATION** means presenting falsified data, citations, or quotations as genuine.

**MISREPRESENTATION** is falsification, alteration, or the misstatement of the contents of documents, academic work, or other materials related to academic matters, including work substantially done for one class as work done for another without receiving prior approval from the instructor.

Violations of the UAB Academic Honor Code are punishable by a range of penalties, from receiving a failing grade on an assignment, to an F in the course, to dismissal. Any course grade of F for academic misconduct supersedes any other grade or notation for that class. Withdrawal from a course while a possible violation of the Academic Honor Code is under review will not preclude the assignment of a course grade that appropriately reflects the student's performance prior to withdrawal if the violation is substantiated.

For more information go to: [www.uab.edu/students/one-stop/policies/academic-honor-code](http://www.uab.edu/students/one-stop/policies/academic-honor-code)

## ASKIT

AskIT is the technology help desk for faculty, staff, and students. They provide free support via telephone, email, or in-person. You will be asked to supply your BlazerID when you request assistance.

Phone: (205) 996-5555 Email: [askit@uab.edu](mailto:askit@uab.edu) Website: [https://uabprod.service-now.com/service\\_portal](https://uabprod.service-now.com/service_portal)

## ATTENDANCE

Class attendance is expected in all SHP programs. Specific class, laboratory or clinical site attendance requirements may be more stringent than university guidelines. Refer to the program requirements in this handbook and in course syllabi for policies. The UAB policy for undergraduates follows.

The University of Alabama at Birmingham recognizes that the academic success of individual students is related to their class attendance and participation. Each course instructor is responsible for establishing policies concerning class attendance and make-up opportunities. Any such policies, including points for attendance and/or participation, penalties for absences, limits on excused absences, total allowable absences, etc., must be specified in the course syllabus provided to students at the beginning of the course term. Such policies are subject to departmental oversight and may not, by their specific prescriptions, negate or circumvent the accommodations provided below for excused absences.

The University regards certain absences as excused and in those instances requires that instructors provide an accommodation for the student who misses assignments, presentations, examinations, or other academic work of a substantive nature by virtue of these excused absences. Examples include the following:

Absences due to jury or military duty provided that official documentation have been provided to the instructor in a timely manner in advance.

Absences of students registered with Disabilities Services for disabilities eligible for "a reasonable number of disability-related absences" provided students give their instructors notice of a disability-related absence in advance or as soon as possible.

Absences due to participation in university-sponsored activities when the student is representing the university in an official capacity and as a critical participant, provided that the procedures below have been followed:

Before the end of the add/drop period, students must provide their instructor a schedule of anticipated excused absences in or with a letter explaining the nature of the expected absences from the director of the unit or department sponsoring the activity.

If a change in the schedule occurs, students are responsible for providing their instructors with advance written notification from the sponsoring unit or department.

Absences due to other extenuating circumstances that instructors deem excused. Such classification is at the discretion of the instructor and is predicated upon consistent treatment of all students. In these instances, instructors must devise a system for reasonable accommodation including, for example,

policies allowing for dropped exams/quizzes, make-up exams, rescheduling of student classroom presentations or early or later submission of written assignments.

## **AWARDS AND HONOR SOCIETIES**

All students in the School of Health Professions are eligible for consideration for the following awards or society memberships.

- Alfred W. Sangster Award for Outstanding International Student – This award is presented annually to an international student in recognition of his or her academic and non-academic achievements.
- Alpha Eta Society – The UAB Chapter of this Society recognizes students registered in the final term of a baccalaureate or graduate health professions program. Inductees must have a cumulative grade point average of 3.0 (4.0 = A), and be in the upper 10% of their program. Nominations are made by program directors in spring and summer terms.
- Cecile Clardy Satterfield Award for Humanism in Health Care – This award is made annually to recognize one outstanding student for humanitarianism, professionalism, and commitment to health care. Nominations are coordinated by program directors, but may also be made by faculty, students, patients, or preceptors.
- Charles Brooks Award for Creativity – This award is made annually in recognition of creative accomplishments such as written publications or artistic contributions which complemented the student's academic activities. Nominations are made by program directors.
- Dean's Leadership and Service Award – Presented to a maximum of three outstanding SHP students annually, this award recognizes leadership to the School, UAB, and the community. Nominations are made by program directors or faculty.
- Phi Kappa Phi – This is the oldest, and most selective, all-discipline honor society in the nation. Membership is by invitation to the top 7.5% of junior students and the top 10% of seniors and graduate students. Nominations are made by program directors.

Please refer to the program section of this handbook for awards and honors available to students in individual programs.

## **BACKGROUND CHECK**

SHP students in clinical programs are required by policy, to undergo a background check using the school's approved vendor, CastleBranch <https://discover.castlebranch.com/>, at the time of program admission, and again, prior to placement in a clinical rotation. Instructions for requesting the background check and appropriate consent forms are provided to students by their programs. Please refer to the policy section of this handbook for the policy statement.

## **BLAZERID / BLAZERNET / EMAIL**

**BLAZERID:** All students receive a unique identifier, the BlazerID, established at: [www.uab.edu/blazerid](http://www.uab.edu/blazerid). Your BlazerID is required for accessing BlazerNET and other campus resources. To activate one's BlazerID, select "Activate Accounts."

**BlazerNET** is the official portal of the UAB information network and is accessible from any Internet-accessible computer, on- or off-campus. Access BlazerNET from UAB home page [www.uab.edu](http://www.uab.edu) then choose UAB Quicklinks.

**Email: uab.edu** Monitor your email regularly. Your UAB email is the official communication medium for courses, news, information and announcements. UAB student email is provided through Microsoft Office 365, a cloud based system. Students have 50 GB of email space and 25 GB of free file 1 TB storage.

## **BLAZER EXPRESS**

The UAB Blazer Express Transit System provides transportation throughout the UAB campus. With a valid UAB ID badge, students can enjoy fare-free bus transportation. All buses are ADA-accessible and can seat approximately 35 riders. For an updated schedule, route maps, and hours of operation please go to [www.uab.edu/blazerexpress/](http://www.uab.edu/blazerexpress/).

## **BOOKSTORE**

There is one bookstore located on the UAB campus, offering a wide variety of products and services to students, including online purchasing and shipping. The bookstore stock UAB memorabilia and college wear in addition to all required textbooks and course material.

### **UAB Barnes and Noble Bookstore**

Location: 1400 University Blvd, 35233

Hours: M – F 8:00 a.m. – 5:00 pm.; Sat Closed; Sun Closed

Telephone: (205) 996-2665      Website: <https://uab.bncollege.com/shop/uab/home>

## **CAMPUS ONECARD**

The UAB OneCard is the official university identification card. It is used for personal identification, for entry to campus events and the recreation center, for library checkout, and other UAB services. It also serves as a declining balance card for the UAB meal plans and for Blazer Bucks accounts. Additional information is available at [www.uab.edu/onecard](http://www.uab.edu/onecard).

## **CAMPUS MAP**

UAB's campus map can be found at the following: [www.uab.edu/map/](http://www.uab.edu/map/)

## **CANVAS LEARNING MANAGEMENT SYSTEM**

The Canvas Learning Management System is the platform used for managing instructional materials online. Canvas course sites are accessed through BlazerNET or at [www.uab.edu/elearning/canvas](http://www.uab.edu/elearning/canvas).

Students should monitor their course sites routinely for communication from faculty and manage course assignments.

## COUNSELING SERVICES

The Counseling and Wellness Center offers no cost, confidential counseling for UAB students related to physical, emotional, social, intellectual, or spiritual concerns. The Center is located in Student Health Services at 1714 9th Ave. South. For more information, call 205-934-5816 or <https://www.uab.edu/students/counseling/>

## STUDENT ADVOCACY, RIGHTS AND CONDUCT (SARC)

Student Advocacy, Rights and Conduct (SARC) is responsible for upholding the integrity and purpose of the university through the fair and consistent application of policies and procedures to students' behavior to ensure a community that respects the dignity and right of all persons to reach their highest potential. SARC delivers programs and services in order to promote student safety and success, the pursuit of knowledge, respect for self and others, global citizenship, personal accountability and integrity, and ethical development. The UAB student conduct code may be accessed online: <http://www.uab.edu/students/sarc/services/student-conduct-code>

## DIVERSITY, EQUITY AND INCLUSION (DEI)

The mission of DEI is to "... champion equity and inclusion and, in particular, to advocate for inclusive excellence and equity so that UAB students, faculty, staff, community partners and friends can flourish and excel." Inspired by "... what we value, what we learn from research and what we teach and share with the world." DEI's goal is "... to inspire our people to take a courageous step to inspire equity and inclusive excellence throughout our state, nation and world, every day." Dr. Paulette Patterson Dilworth is the Vice President responsible for the activities of this office. Information: <http://www.uab.edu/dei/>

## DISABILITY SUPPORT SERVICES (DSS)

"DSS provides an accessible university experience through collaboration with UAB partners. These partnerships create a campus where individuals with disabilities have equal access to programs, activities, and opportunities by identifying and removing barriers, providing individualized services, and facilitating accommodations."

"DSS serves as the university-appointed office charged with providing institution-wide advisement, consultation, and training on disability-related topics which include legal and regulatory compliance, universal design, and disability scholarship."

To apply for accommodations contact DSS. **Note:** *You must have your Blazer ID and password.*

Telephone: (205) 934-4205 or (205) 934-4248 (TDD) Fax: (205) 934-8170  
Email: [dss@uab.edu](mailto:dss@uab.edu) Website: [www.uab.edu/students/disability/](http://www.uab.edu/students/disability/)

## DRUG SCREENING

By policy, SHP students in clinical programs are required to undergo a routine drug screen using the school's approved vendor, CastleBranch <https://discover.castlebranch.com/>, at the time of program admission and again prior to placement in a clinical rotation. Instructions for requesting the drug screen and appropriate consent forms will be provided to students by their programs. Please refer to the policy

section of this handbook for the school and university policy statements. The Office for Student Recruitment, Engagement and Success (OSRES) manages the procedures and compliance for the school. If you have questions, contact them at (205) 934-4194 or [shp@uab.edu](mailto:shp@uab.edu) or visit room 230 in the School of Health Professions Building.

For more information visit: <http://www.uab.edu/shp/home/about-shp/student-services>

## EMERGENCIES

Report suspicious or threatening activity to the UAB Police Department immediately. Law officers are available 24 hours, seven days a week. Also, more than 300 emergency blue light telephones connected directly to the police dispatch are located throughout campus.

**UAB Police:** Dial 911 *from a campus phone* or call: 934-3535; 934-HELP (4357); or 934-4434

Emergencies affecting campus are communicated via the following:

Weather & Emergency Hotline: (205) 934-2165 • University home web page: [www.uab.edu](http://www.uab.edu)

- Webpage: [www.uab.edu/emergency](http://www.uab.edu/emergency)
- Announcements on BlazerNET
- Twitter@UABALERT: [www.twitter.com/uabalert](http://www.twitter.com/uabalert)
- [facebook.com/UABALERT](https://www.facebook.com/UABALERT)
- Cell phone messages and SMS text – register for B-ALERT notices via <https://idm.uab.edu/ens/b-alert>

## FERPA

The Family Educational Rights and Privacy Act (FERPA) of 1974 provides protection for all educational records related to students enrolled in an educational program. Information about your rights and protection of your records is available at the following sites:

<https://sa.uab.edu/enrollmentservices/ferpa/>; If you have questions or concerns about FERPA issues, you may email [FERPA@uab.edu](mailto:FERPA@uab.edu), or contact the SHP Office for Student Recruitment, Engagement and Success.

## FINANCIAL AID

Located at 1700 University Blvd., Lister Hill Library, Room G20. Hours of Operation are from 8:00 am to 5:00 pm Monday thru Friday. Phone: (205) 934-8223; Fax: (205) 975-6168. Additional information can be located on the website [www.uab.edu/students/paying-for-UAB](http://www.uab.edu/students/paying-for-UAB).

## FOOD SERVICES

Dining facilities available on campus, closest to the SHP buildings include:

- Commons on the Green – located on the Campus Green, south of 9th Avenue and the Campus Recreation Center
- Einstein’s Bagels – located at the plaza entrance to the Learning Resource Center. Hours vary per semester.

Vending machines are located in the basement of the Learning Resource Center and on the 6<sup>th</sup> floor of the Webb Building. Additional information about meal plans and campus dining facilities is available at [www.uab.edu/dining](http://www.uab.edu/dining).

## GRADUATE SCHOOL

The UAB Graduate School offers doctoral programs, post-master's specialist programs, and master's level programs. Graduate programs in SHP are coordinated through the Graduate School and students must adhere to the Graduate School policies and procedures. Graduate School information for current students is available at [www.uab.edu/graduate/](http://www.uab.edu/graduate/).

## GRADUATION

All students must complete an application for degree six months prior to graduating and not later than the deadline in the academic calendar. <https://www.uab.edu/commencement/faqs>. The University holds commencement every semester. Check the commencement website for the most current information: <https://www.uab.edu/commencement/>

## STUDENT HEALTH SERVICES

The University provides prevention, counseling, and treatment services to students through Student Health Services located at 1714 9<sup>th</sup> Avenue South. The clinic is open from 8:00 a.m. – 5:00 p.m. Monday – Thursday; 9:00 a.m. – 5:00 p.m. Friday, but is closed between noon and 1:00 p.m. daily. Detailed information about services and operating practices is located on the SHS website at [www.uab.edu/studenthealth](http://www.uab.edu/studenthealth). Appointments may be scheduled by calling 205-934-3580.

## MEDICAL CLEARANCE

SHP students in programs that are on campus (not all online), are required to receive medical clearance at the time of program admission. UAB Student Health Services utilizes a secure web-based process for the storage of required documents accessed through BlazerNET. More information is available at the Student Health Services website: [www.uab.edu/students/health/medical-clearance/immunizations](http://www.uab.edu/students/health/medical-clearance/immunizations).

## IMMUNIZATION POLICY

To provide a safe and healthy environment for all students, faculty and staff at the University of Alabama at Birmingham (UAB), first-time entering students, international students and scholars, and students in clinical programs, provide proof of immunization against certain diseases: <https://www.uab.edu/policies/content/Pages/UAB-AD-POL-0000086.aspx>

## INSURANCE WAIVERS

To ensure that all students have adequate health care coverage, including ongoing primary and specialty care, the University of Alabama at Birmingham (UAB) requires all eligible students to have major medical health insurance. Students can provide proof of their own private coverage or be enrolled in the Student Health Insurance Plan (SHIP). The SHIP is a 1-year commercial policy provided by United HealthCare and is re-negotiated annually. This policy is a comprehensive health insurance policy at an affordable cost that is specifically designed to meet the needs of UAB Students. If you are required to have insurance but have sufficient coverage on another plan and wish to opt out of the SHIP, you are required to submit



a waiver to Student Health Services at the beginning of every semester. More information including submitting a waiver can be found at this website: <https://www.uab.edu/students/health/insurance-waivers/waivers>

## **HIPAA TRAINING**

The Health Insurance Portability and Accountability Act includes significant requirements for protecting individual privacy of health information. All students in the School of Health Professions must complete an online tutorial and be tested on HIPAA regulations at the time of program admission. A BlazerID is required to access the training site, located at [www.uab.edu/learningsystem](http://www.uab.edu/learningsystem). Compliance with the training requirement is monitored monthly. Students who have not completed the training are reported to the Office for Student Recruitment, Engagement, and Success for follow-up with the appropriate program director.

## **INSTITUTIONAL REVIEW BOARD FOR HUMAN USE (IRB)**

Student researchers must comply with all requirements for protection of human subjects. Detailed information is available on the IRB website [www.uab.edu/irb](http://www.uab.edu/irb)

## **INTELLECTUAL PROPERTY**

Intellectual property refers to an asset that originated conceptually, such as literary and artistic works, inventions, or other creative works. These assets should be protected and used only as the creator intends. Training materials defining inventor status, patent criteria, and other intellectual property issues is available at [www.uab.edu/research/administration/offices/OSP/Pages/Training.aspx](http://www.uab.edu/research/administration/offices/OSP/Pages/Training.aspx).

## **LACTATION CENTERS**

Through the work of the UAB Commission on the Status of Women, the University has provided several lactation centers for students, faculty, and staff across the campus. Locations of the centers are available at <https://www.uabmedicine.org/-/lactation-consultants-help-moms-navigate-breastfeeding-journey>. The School of Health Professions' lactation room is in the Susan Mott Webb Nutrition Sciences Building at 1675 University Boulevard, room 219A. Female students enrolled in the School of Health Professions have access to the room via their student ID/OneCard. If you cannot access the room, contact the building administrator, Andrew Eaton at (205) 934-4133 or the SHP Office for Student Recruitment, Engagement and Success at 934-4194 or email: [shp@uab.edu](mailto:shp@uab.edu).

## **LIBRARIES AND LEARNING RESOURCE CENTER**

UAB's libraries house excellent collections of books, periodicals, microforms, and other media. have online remote access to catalogs and online collections. Computers are available for student use during regular hours of operation. <https://library.uab.edu/locations>

### **Learning Resource Center (LRC)**

The School of Health Professions Learning Resource Center (LRC) provides a unique set of enterprise solutions that promote an exciting, intriguing and innovative learning environment. It

provides a state-of-the-art media studio; audio/visual support; and information technology management of public, classroom and testing labs. Web: <http://www.uab.edu/lrc/>

Located: 1714 9<sup>th</sup> Avenue S. Phone: (205) 934-5146 Email: [shplrc@uab.edu](mailto:shplrc@uab.edu)

Hours: Monday – Thursday 7:00 am – 8:00 pm; Friday 7 am – 5:30 pm;

Saturday - closed; Sunday - closed

### **Lister Hill Library of the Health Sciences**

This is the largest biomedical library in Alabama, and one of the largest in the south. Located across the crosswalk from the School, the LHL has extension libraries in University Hospital and The Kirklin Clinic. Dedicated librarians hold “office hours” in the Learning Resource Center weekly.

Location: 1700 University Boulevard Website:

<https://library.uab.edu/locations/lister-hill>

Phone: (205) 934-2230

### **Mervyn H. Sterne Library**

A collection of more than one million items supporting teaching and research in the arts and humanities, business, education, engineering, natural sciences and mathematics, and social and behavioral sciences.

Location: 913 13<sup>th</sup> Street South

Website: <https://library.uab.edu/locations/sterne>

Phone: (205) 934-6364 (Reference) (205) 934-4338 (User Services)

## **ONESTOP STUDENT SERVICES**

If you have questions or need assistance with an academic or administrative process, the UAB OneStop is where to go! Advisers will help you solve your problem or do the legwork for you if another UAB resource is needed. OneStop is located in the Hill Student Center 1400 University Blvd. You may contact the OneStop office by phone or email at (205) 934-4300; 855-UAB-1STP; (855) 822-1787; [onestop@uab.edu](mailto:onestop@uab.edu). Additional information is available at [www.uab.edu/onestop](http://www.uab.edu/onestop).

## **PARKING**

Student vehicles must be registered with UAB Parking and Transportation Services, located at 608 8<sup>th</sup> Street South. The office is open Monday – Friday from 7:30 a.m. – 5:00 p.m. Parking is allocated on a first-come, first-served basis. Parking fees are established by location, payable by semester or year, and are billed to the student’s account. Additional information is available at [www.uab.edu/parking](http://www.uab.edu/parking).

## **PATIENT CARE PARTNERSHIP**

Students in health professions programs learn general information about the health care industry as well as knowledge and skills specific to their chosen profession. The American Hospital Association (AHA) ([www.aha.org](http://www.aha.org)) is an excellent resource for industry information. One role fulfilled by the AHA is that of patient advocate. The Patient Care Partnership brochure (link below) outlines rights and

responsibilities of patients during hospital stays. [www.aha.org/aha/issues/Communicating-With-Patients/pt-care-partnership.html](http://www.aha.org/aha/issues/Communicating-With-Patients/pt-care-partnership.html).

## PLAGIARISM AND TURNITIN

Plagiarism is academic misconduct that will result in a grade of zero and may result in dismissal from the School of Health Professions and UAB (see Grievance Procedures for Violations of Academic Standards). All papers submitted for grading in any SHP program may be reviewed using the online plagiarism monitoring software. Please note that all documents submitted to *Turnitin.com* are added to their database of papers that is used to screen future assignments for plagiarism.

## RECREATION CENTER

The campus Recreation Center, located at 1501 University Blvd, Birmingham, AL 35294, is open to faculty, staff, students, and their families. A valid student identification card or membership card is required for access. Facilities include basketball courts, racquetball courts, weight rooms, swimming pools, exercise rooms, and indoor track. Check the website for information about hours and services at [www.uab.edu/campusrecreation](http://www.uab.edu/campusrecreation).

## SCHOLARSHIPS: BLAZER SCHOLARSHIP MANAGEMENT AND RESOURCE TOOL (B-SMART)

The OSRES manages the School of Health Professions' scholarship offerings and will send reminders to students when applications are open. Visit B Smart and start an application to automatically be considered for scholarship opportunities in SHP. The SHP Scholarship Committee, comprised of faculty and administrators, review and select awardees.

SHP scholarships are the following:

*Carol E. Medders Endowed Scholarship* – Funding for students enrolled in a graduate program in the School of Health Professions. Awards are based on academic achievement and unmet financial need.

*Ethel M. and Jessie D. Smith Endowed Nursing and Allied Health Scholarship* – Funding for students enrolled in SHP programs with GPA 3.0 or above and unmet financial need. Student must be a resident of the state of Alabama at the time of enrollment.

*Lettie Pate Whitehead Foundation Scholarship* – Funding for female students from selected states (AL, FL, GA, LA, MS, NC, SC, TN) enrolled in SHP programs. Award amounts are variable and are based on unmet financial need.

*National Alumni Society Dean's Scholarship* – Funding from the UAB National Alumni Society for two scholarships per year, one to a graduate student and one to an undergraduate student.

*Sandra Dunning Huechtler Endowed Memorial Award* – Funding for students enrolled in SHP program with GPA 3.0 or above and unmet financial need.

*SHP Dean's Scholarship* – Funding to recruit or retain outstanding students. Awards are based on academic achievement, and unmet financial need.

You must visit the Blazer Scholarship Management and Resource Tool (B-SMART) to apply <http://www.uab.edu/students/paying-for-college/> .

Many programs in SHP also have scholarships available to currently enrolled students. Please see the program section of this handbook for that information.

## SOCIAL MEDIA

Social media can serve as useful communication tools. However, health professions students should use the forums judiciously. The School's official sites are the following:

- Twitter: [https://twitter.com/uab\\_shp](https://twitter.com/uab_shp) • Vimeo: <http://vimeo.com/uabshp>
- Facebook: [www.facebook.com/UABSHP](http://www.facebook.com/UABSHP) • LinkedIn: [www.linkedin.com/groups?gid=3596638](http://www.linkedin.com/groups?gid=3596638)
- YouTube: [www.youtube.com/uabshp](http://www.youtube.com/uabshp) • Website: [www.uab.edu/shp](http://www.uab.edu/shp)

The School's Academic Affairs Committee published the following guidelines:

The Academic Affairs Committee proposes the following for social networking vehicles. Online communities like provide opportunities to share and explore interests that enrich the higher education learning experience. However, use them with discretion. UAB social media users are expected to act with honesty, integrity, and respect for others.

**Professional Use** - Only UAB employees authorized by their departments may use social networking Web sites to conduct University business. The authorized employee/position will serve as the point of contact for the web site. In keeping with University policy<sup>1</sup>, the authorized employee may post on a social network profile: the University's name, school, department, and/or unit information, a University email address or University telephone number for contact purposes, or post official department information, resources, calendars, and events. The employee should use care that any personal opinions or opposition to the University either by direct statement or perception not be published.

**General Use** - The following guidelines are strongly suggested:

1. Use networking sites legally and appropriately. Consider your personal obligation as a citizen of the university. Use proper conduct in your posts regarding the university and your colleagues/fellow students.
2. Consider the use of a student, staff or faculty member to monitor any departmental social pages. All parties need to understand the guidelines presented.
3. Remember, you cannot ensure who does and does not have access to your information. Any text or photo placed online is available to anyone in the world – even if you limit access to your site.
4. Information that you post online may continue to stay on the World Wide Web even after you erase or delete that information from your profiles or blog. Do not post anything that could reflect negatively on you, your family, your friends, and the university.
5. Do not post any confidential or sensitive information online.
6. By agreeing to the terms of use, online communities have your permission to republish your content worldwide and share information with advertisers, third parties, law enforcement, and others.
7. You are legally responsible for your posts on the social networking sites. Be discreet, respectful, and as accurate/factual as you can be in any comments or content you posted online.
8. Potential employers, admissions officers, and scholarship committees often search social networking sites to screen candidates. Your profile will be a part of how others know you.

## TUITION AND FEES

Tuition and fees for the University are published annually under the “Current Students” tab of the UAB website. They may be paid through BlazerNET. There are two tuition rates: Alabama resident (in-state) and Non-resident (out-of-state). Currently, non-resident students who register for online course sections pay resident tuition. Non-resident tuition is charged for on-site courses such as: clinical practicums, independent study courses, and project courses. SHP programs have specific fees attached to programs, courses or laboratories. See the school fees at <https://www.uab.edu/students/paying-for-college/detailed-tuition-and-fees>

Payment deadlines for each semester are published on the official academic calendar and on the UAB website at [www.uab.edu/whentopay/](http://www.uab.edu/whentopay/). Please note that failure to meet payment deadlines can result in being administratively withdrawn from courses.

## WEATHER

Severe weather situations that may affect the safety of students, faculty, and staff are communicated through the same channels as other emergencies. Severe weather precautions are published at [www.uab.edu/emergency/preparedness](http://www.uab.edu/emergency/preparedness). Other information sources include:

<ul style="list-style-type: none"><li>• Webpage: <a href="http://www.uab.edu/emergency">www.uab.edu/emergency</a></li></ul>	<ul style="list-style-type: none"><li>• B-ALERT system: <a href="http://www.uab.edu/balert">www.uab.edu/balert</a></li></ul>
<ul style="list-style-type: none"><li>• Hotline: (205)- 934-2165</li></ul>	<ul style="list-style-type: none"><li>• WBHM Radio (90.3 FM)</li></ul>

## WITHDRAWAL FROM COURSE / PROGRAM

Withdrawal from a course or from your program is an official process and should be discussed with your academic advisor and / or program director. Most programs in the School are full-time and the curricula specifically sequenced. Withdrawal from a course may risk your wait time to register for the class again. You might have to wait for a full year before resuming enrollment in the program. Withdrawals are made through the UAB registration system via the Student Resources tab in BlazerNET. Notice of program withdrawal should be given in writing to the program director. Please refer to the following link for additional information on withdrawal guidelines: <https://www.uab.edu/students/one-stop/classes/add-drop-and-withdrawal-policy>

## SECTION 2 – SHP AND UAB POLICIES

### SCHOOL OF HEALTH PROFESSIONS POLICIES

#### SHPB EMERGENCY PLAN

[https://www.uab.edu/shp/home/images/PDF/SHPB\\_BUILDING\\_EMERGENCY\\_PLAN\\_2019.pdf](https://www.uab.edu/shp/home/images/PDF/SHPB_BUILDING_EMERGENCY_PLAN_2019.pdf)

#### FINAL COURSE GRADE APPEAL PROCESS

[www.uab.edu/shp/home/images/PDF/grievance\\_procedures.pdf](http://www.uab.edu/shp/home/images/PDF/grievance_procedures.pdf)

#### PLAGIARISM

[www.uab.edu/shp/home/images/PDF/Plagiarism\\_Policy.pdf](http://www.uab.edu/shp/home/images/PDF/Plagiarism_Policy.pdf)

*Please note that all papers submitted for grading in any SHP program may be reviewed using the online plagiarism monitoring software, Turnitin.com. All documents submitted to Turnitin.com are added to their database of papers used to screen future assignments for plagiarism.*

#### BACKGROUND CHECK AND DRUG SCREEN

##### POLICY

With the exceptions noted below, students admitted to clinical programs in the School of Health Professions (SHP) will complete a routine drug screening and criminal background check using the vendor(s) with which the School has a current agreement for those services. These screenings should be completed prior to the end of the first term of enrollment. A second routine drug screening and criminal background check using the approved school vendor, or a vendor required by the assigned clinical facility, will be completed prior to placement in a clinical rotation. Any required additional screenings, and/or those specified by waived programs, will be at the discretion of the program.

Students enrolled in SHP programs requiring an internship or other site placement as a component of degree requirements will complete a learning module in the campus learning management system by the end of the first semester of enrollment. They will submit the results of a drug screening and criminal background check from an approved vendor, prior to the end of the semester, immediately preceding the semester for which the internship or site placement occurs.

- School-negotiated fees for these screenings will be the responsibility of the student.
- Students who have completed the screenings as a condition of enrollment in a previous SHP program, are waived from the requisite unless the current program of enrollment also includes an internship or clinical placement component for degree completion.
- Drug screening and background check results performed by an approved vendor, within the most recent twelve months, may fulfill the SHP requirement.

- The rules and regulations governing individual placement sites may include additional provisions and/or more stringent guidelines which supersede this policy. Fees for these screenings are the responsibility of the student.
- Should you fail the drug screening or your background check contains issues that may prevent you from receiving or sitting for licensure, a representative from the SHP Office for Student Recruitment, Engagement and Success (OSRES) will contact you. Depending upon the outcome, you may be dismissed from the program. See your program's guidelines regarding specific consequences.

Programs requiring a background check and drug screening by the end of the first semester of enrollment and again, prior to clinical placement are the following:

Doctor of Physical Therapy  
 Master of Science in Clinical Laboratory Science  
 Master of Science in Genetic Counseling  
 Master of Science in Health Physics  
 Master of Science in Nuclear Medicine Technology  
 Master of Science in Nutrition Sciences – Dietetic Internship Clinical Track  
 Master of Science in Nutrition Sciences – Dietitian Education Program  
 Master of Science in Occupational Therapy – (entry level)  
 Master of Science in Physician Assistant Studies

Programs requiring the background check and drug screening learning module during the first semester of enrollment, a criminal background check and drug screening by the end of the semester immediately preceding clinical placement or internship are the following:

Bachelor of Science in Health Care Management

Programs required to complete the learning module before the end of the first semester of enrollment are the following:

Bachelor of Science in Biomedical Sciences

\*Programs waived from the Background Check and Drug Screening requirement are the following:

Doctor of Philosophy in Administration Health Services – all concentrations  
 Doctor of Philosophy in Rehabilitation Sciences  
 Doctor of Science in Healthcare Leadership  
 Graduate Certificate in Biotechnology Regulatory Affairs  
 Graduate Certificate in Clinical Informatics  
 Graduate Certificate in Dietitian Education  
 Graduate Certificate in Health Care Quality and Safety  
 Graduate Certificate in Low Vision Rehabilitation  
 Master of Science in Biotechnology  
 Master of Science in Health Administration (International, Residential and Executive tracks)  
 Master of Science in Health Care Quality and Safety



Master of Science in Health Informatics (all concentrations)  
Master of Science in Healthcare Simulation  
Master of Science in Nutrition Sciences - Dietetic Research Track  
Master of Science in Nutrition Sciences – Lifestyle Management and Disease Prevention Track  
Master of Science in Nutrition Sciences – Prior Learning Clinical Track

**Attachments:**

- Procedure for Criminal Background Check and Drug Screening
- Student Instructions
- Consent to Drug Testing and Release of Drug Test Results
- Consent to Criminal Background Check and Release of Results

**Note:** Replaces Criminal Background Check and Drug Screening Policy 2012

\* Students enrolled in exempt programs who participate in a course(s) incorporating community, corporate or other high impact, out-of-classroom activities such as service learning, capstone projects or other hands-on learning experiences, may be required by placement sites to submit background check and drug screening results. Students are responsible for the fees associated with such screening

**Attachment 1: Procedure for Criminal Background Check and Drug Screening**

1. Program directors (or designees) provide all accepted students with instructions for completing a background check and drug screening.
2. Students request the specified package on the approved SHP vendor website and pay the required fees.
3. Assigned designee(s) in the SHP Office for Student Recruitment, Engagement and Success (OSRES) review and provide compliance reports for programs.
4. In the event a report reveals information which may prevent a student from being placed in a clinical rotation or internship site or potentially makes them ineligible for professional certification or licensure, the OSRES contacts the individual student to discuss the implications of said information in the report. If such information exists, the student must acknowledge in writing their decision to continue in the program's didactic phase with the understanding that a degree cannot be awarded without completion of required clinical practice or internship placement.
5. Prior to clinical placement, program directors (or designees) will provide students with instructions to complete a repeat background check and drug screening. If a vendor is specified by the placement site or preceptor, the preceptor (or designee) will provide students with instructions.
6. Students will follow the instructions provided by sites or placements if they go beyond those of the School.
7. Students are responsible for fees required for screenings.

8. OSRES designee discusses with individual students implications for information which may inhibit placement at a clinical or internship site.
9. Students provide preceptors or internship supervisors with the required information from the results of their background check and drug screening reports.

## Attachment 2:



### STUDENT INSTRUCTIONS FOR UNIVERSITY OF ALABAMA AT BIRMINGHAM SCHOOL OF HEALTH PROFESSIONS

#### About CastleBranch.com

CastleBranch is a secure platform that allows you to order your background check & drug test online. Once you have placed your order, you may use your login to access additional features of CastleBranch, including document storage, portfolio builders and reference tools. CastleBranch also allows you to upload any additional documents required by your school.

#### Order Summary

##### Required Personal Information

- o In addition to entering your full name and date of birth, you will be asked for your Social Security Number, current address, phone number, and e-mail address.

##### Drug Test (LabCorp or Quest Diagnostics)

- o Within 24-48 hours after you place your order, the electronic chain of custody form e-chain will be placed directly into your CastleBranch account. This e-chain will explain where you need to go to complete your drug test.

##### Payment Information

- o At the end of the online order process, you will be prompted to enter your Visa or MasterCard information. Money orders are also accepted, but will result in a \$10 fee and additional turn-around-time.

#### Place Your Order

Go to: [www.castlebranch.com](http://www.castlebranch.com) and enter package code:

AH01 - Background Check and Drug Test

You will be required to enter your program under "Student Information" classification

You will then be directed to set up your CastleBranch profile account.

#### View Your Results

Your results will be posted directly to your CastleBranch profile account. You will be notified if there is any missing information needed in order to process your order. Although 95% of background check results are completed within 3-5 business days, some results may take longer. Your order will show as "In Process" until it has been completed in its entirety. Your school's administrator can also securely view your results online with their unique username and password. If you have any additional questions, please contact the Service Desk at 888.723.4263 x 7196 or visit the website to submit your question at: <https://www.castlebranch.com/contact-us>.

**Attachment 3**

**UAB School of Health Professions**

**Consent to Drug Testing and Release of Drug Test Results**

For and in consideration of my participation in clinical education experiences, understand that I will be required to submit to drug testing as a prerequisite to my assignment to a clinical site. I hereby consent to be tested for drugs and consent to the release of any such drug test results to the Office for Student Recruitment, Engagement and Success (OSRES), my Program Director, and the subsequent release of such drug test results to the clinical site to which I am assigned.

I understand that any clinical site to which I am assigned has the right to require additional drug testing as a condition of my placement. I hereby consent to any facility-required drug testing and consent to the release of such drug test results to my Program Director.

\_\_\_\_\_  
Student's Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Parent/legal guardian  
(required only if student is under 19)

\_\_\_\_\_  
Date

**Attachment 4**

**UAB School of Health Professions**

**Consent to Criminal Background Check and Release of Results**

**For and in consideration of my participation in clinical education experiences, understand that I will be required to submit to a criminal background check as a prerequisite to my assignment to a clinical site. I hereby consent to have a criminal background check and consent to the release the results to the Office for Student Recruitment, Engagement and Success (OSRES), my Program Director, and the subsequent release of the results to the clinical site to which I am assigned.**

**I understand that any clinical site to which I am assigned has the right to require additional background check as a condition of my placement. I hereby consent to any facility-required background check and consent to the release of the results of the check to my Program Director.**

\_\_\_\_\_  
**Student's Signature**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Signature of Parent/legal guardian  
(required only if student is under 19)**

\_\_\_\_\_  
**Date**

## COVID-19 CAMPUS ENTRY

UAB is committed to making our campus among the safest in America as students return at the right time and under the right conditions.

- Students admitted to the School of Health Professions will follow university guidelines for COVID-19 entry found at: <https://www.uab.edu/uabunited/students>
- Guidelines include wearing a mask while on campus; maintaining proper social distancing; washing hands often; cleaning and disinfecting frequently touched objects and surfaces; and completing required training and reporting tasks.
- All UAB students coming to campus for the fall semester 2020 will receive a free COVID-19 test as part of the GuideSafe™ entry to campus program.
- Prior to placement in clinical settings, SHP students will follow the UAB School of Health Professions Plan/Checklist for Students entering Clinical Experiences.

### UAB School of Health Professions

#### Work Plan/Checklist for Students entering Clinical Experiences

Based on University-Wide Task Force Recommendations on Students Entering Clinical Settings

Timeline	Task Force Recommendation	Implementation Checklist	TBD/Tools
<b>Prior to the start of clinical learning experiences</b>	Students resumed face-to-face clinical learning experiences in June 2020.	<input type="checkbox"/> Confirm clinical site.	Appropriate faculty in each program to confirm
		<input type="checkbox"/> Confirm clinical site implementing appropriate COVID-19 safety measures prior to placement of students.	Appropriate faculty in each program to confirm
		<input type="checkbox"/> Confirm PPE needed by student and required by clinical site.	Appropriate faculty in each program to confirm
		<input type="checkbox"/> Provide student needed PPE for clinical placement. (see policies about PPE below)	Appropriate faculty in each program to conduct task
	Student participation in clinical learning experiences during	<input type="checkbox"/> Prior to participation in clinical learning experiences, all students must complete the web-	UAB required training course located in the UAB

Timeline	Task Force Recommendation	Implementation Checklist	TBD/Tools
	the COVID-19 Pandemic is voluntary.	based training course “COVID-19: Basic Safety and Awareness Course” (see below for more training.)	Campus Learning System accessible through BlazerNET.
		<input type="checkbox"/> Prior to participation in planned clinical learning experiences, students will read and sign the Student Acknowledgement, Consent to Participate, and Assumption of Risk to Participate in Onsite Placement document.	Student Acknowledgement, Consent to Participate, and Assumption of Risk to Participate in Onsite Placement document
		<input type="checkbox"/> Students who defer participation in clinical learning experiences will work collaboratively with faculty in development of a re-entry plan and a revised program of study that will meet the program’s progression and graduation policies.	Appropriate faculty in each program to work with identified student
	All students complete COVID-19 training prior to clinical placement.	<input type="checkbox"/> Prior to the first day of clinical learning experiences all students must complete the web-based training course “COVID-19: Basic Safety and Awareness Course”.	UAB required training course located in the UAB Campus Learning System accessible through BlazerNET.
		<input type="checkbox"/> Additional training that is discipline-specific will be created/selected by individual Schools/Program; such training will be tailored to address differences in the level of the student (undergraduate versus graduate), the practice roles for the which the students are being trained, the clinical activities in which the students will be engaged, the probability that students will be working with COVID-19 patients, and the setting in which clinical learning experiences occur, including but not limited to acute care, primary care, specialty clinics, nursing homes, rehabilitation facilities, schools, and patient homes	<b>HealthStream Training Resources REQUIRED for all SHP clinical students:</b> <ul style="list-style-type: none"> <li>○ Coronavirus (COVID-19): What every healthcare worker should know</li> <li>○ Personal Protective Equipment for Nurses and Healthcare Personnel</li> </ul>

Timeline	Task Force Recommendation	Implementation Checklist	TBD/Tools
		<input type="checkbox"/> <b>Other Recommended Resources:</b> <ul style="list-style-type: none"> <li>○ How to wash your hands: <a href="https://www.youtube.com/watch?v=cViNneQbPyA&amp;feature=youtu.be">https://www.youtube.com/watch?v=cViNneQbPyA&amp;feature=youtu.be</a></li> </ul> Review the following, including the embedded links: <ul style="list-style-type: none"> <li>○ What healthcare personnel should know about caring for patients with confirmed or possible coronavirus disease 2019 (COVID-19) <a href="https://www.cdc.gov/coronavirus/2019-ncov/hcp/caring-for-patients-H.pdf">https://www.cdc.gov/coronavirus/2019-ncov/hcp/caring-for-patients-H.pdf</a></li> </ul>	<ul style="list-style-type: none"> <li>○ Hand Hygiene for Providers: Protect Yourself and Patients</li> </ul>
	All students will comply with policies and recommendations regarding the proper use of personal protective equipment (PPE).	<input type="checkbox"/> All students returning to the clinical setting will use the appropriate PPE based on the policies and guidelines of the clinical setting, the type of clinical setting and patients with which the students will be working, and/or any other relevant guidelines or policies (e.g., as required by accrediting bodies or internal policies).	Appropriate faculty in each program to coordinate and conduct task
		<input type="checkbox"/> Schools will purchase and provide students with PPE not provided by clinical setting.	Appropriate faculty in each program to coordinate with fiscal officer.
		<input type="checkbox"/> Undergraduate/prelicensure students will not be assigned to work with patients with active COVID-19 or in units where such patients are being cared for.	Appropriate faculty in each program will relay this information to site.
<b>During clinical learning experiences</b>	All students must comply with UAB's COVID-19 Testing Program	<input type="checkbox"/> All students must participate in periodic random COVID-19 testing if selected.	Student Health

Timeline	Task Force Recommendation	Implementation Checklist	TBD/Tools
	All students will complete health screening surveys as directed to assess existence of COVID-19 related symptoms, exposure history and testing history.	<input type="checkbox"/> Prior to participation in clinical learning experiences, students will complete the Healthcheck health screening survey to assess the existence of COVID-19 related symptoms, exposure history, and testing history. The Healthcheck Screening Survey is accessed using the following link: <a href="https://www.uab.edu/coronavirus/reentry/healthcheck">https://www.uab.edu/coronavirus/reentry/healthcheck</a>	Access the Healthcheck Screening Survey at the following link:  <a href="https://www.uab.edu/coronavirus/reentry/healthcheck">https://www.uab.edu/coronavirus/reentry/healthcheck</a>
		<input type="checkbox"/> Following each screening, students who have a negative screening (e.g., no symptoms) may participate in clinical learning experiences.  Students who have a positive screening (e.g., experiencing symptoms or exposure to infected individual) will not be permitted to participate in clinical learning experiences until medically cleared by Student Health.	Student Health and appropriate faculty in each program
		<input type="checkbox"/> Students must also report the onset of any symptoms, exposures or positive test results at the time they occur at the following link: <a href="https://www.uab.edu/coronavirus/reentry/healthcheck">https://www.uab.edu/coronavirus/reentry/healthcheck</a>	Continuation of reporting using the following link:  <a href="https://www.uab.edu/coronavirus/reentry/healthcheck">https://www.uab.edu/coronavirus/reentry/healthcheck</a>
		<input type="checkbox"/> In the event the students has a positive COVID-19 test result, they must immediately report the test result as well as individuals with whom they have been in close proximity and may have exposed to the virus through a proximity/contact tracing application that is being developed by UAB in conjunction with the Alabama Department of Public Health.	Student Health



Timeline	Task Force Recommendation	Implementation Checklist	TBD/Tools
		<input type="checkbox"/> Student must be medically cleared to return to clinic. Once cleared, student must request documentation of clearance from Student Health to upload to patient portal and provide to placement site and clinical coordinator(s).	Student Health and appropriate faculty in each program

**Additional Information**

- Healthcheck may also be accessed through the UAB app. Download from: <https://www.uab.edu/app/>
- Although voluntary, students are encouraged to participate in sentinel testing for COVID-19. Sentinel testing is a system that collects information useful for monitoring trends in diseases and pathogens. For the COVID-19 pandemic, plans are to test between 2.5% to 5% of the on-campus population weekly to identify how much of the COVID-19 virus is circulating among our population. Students selected will be notified via email by Student Health. Once notified, you will receive a specific time to report to Student Health. Results will be provided within 36 hours.
- Students are also encouraged to participate in contact tracing through use of the GuideSafe Exposure app at: <https://www.uab.edu/uabunited/guidesafe>
- Persistent failure or willful disregard for health and safety protocols by any student will result in consequences consistent with UAB’s discipline policies for students outlined in the Student Conduct Code: <https://www.uab.edu/policies/content/Pages/UAB-UC-POL-0000781.html>

# UAB POLICIES

## CLASSROOM BEHAVIORS

### ATTENDANCE / ABSENCE (UNDERGRADUATE)

<http://catalog.uab.edu/undergraduate/progresstowardadegree/#enrollmenttext>

## HEALTH

### AIDS AND HIV INFECTION

[www.uab.edu/policies/content/Pages/UAB-HS-POL-0000252.aspx](http://www.uab.edu/policies/content/Pages/UAB-HS-POL-0000252.aspx)

### BODY FLUID EXPOSURE

[www.uab.edu/humanresources/home/employeehealth/reportingexposures](http://www.uab.edu/humanresources/home/employeehealth/reportingexposures)

### IMMUNIZATIONS

[www.uab.edu/policies/content/Pages/UAB-AD-POL-0000086.aspx](http://www.uab.edu/policies/content/Pages/UAB-AD-POL-0000086.aspx)

## SUBSTANCE USE/ABUSE

### ALCOHOLIC BEVERAGES, USE AND CONSUMPTION

[www.uab.edu/policies/content/Pages/UAB-AD-POL-0000071.aspx](http://www.uab.edu/policies/content/Pages/UAB-AD-POL-0000071.aspx)

### DRUG FREE CAMPUS (GENERAL POLICY)

[www.uab.edu/policies/content/Pages/UAB--POL-0000046.aspx](http://www.uab.edu/policies/content/Pages/UAB--POL-0000046.aspx)

Drug-free Campus Policy for Students (Attachments)

Attachment A - [www.uab.edu/policies/content/Pages/UAB--GDL-0000632.aspx](http://www.uab.edu/policies/content/Pages/UAB--GDL-0000632.aspx)

Attachment B - [www.uab.edu/policies/content/Pages/UAB--GDL-0000626.aspx](http://www.uab.edu/policies/content/Pages/UAB--GDL-0000626.aspx)

Attachment B.1 - [www.uab.edu/policies/content/Pages/UAB-AD-GDL-0000627.aspx](http://www.uab.edu/policies/content/Pages/UAB-AD-GDL-0000627.aspx)

Attachment C - [www.uab.edu/policies/content/Pages/UAB--GDL-0000628.aspx](http://www.uab.edu/policies/content/Pages/UAB--GDL-0000628.aspx)

### NONSMOKING

[www.uab.edu/policies/content/Pages/UAB-HS-POL-0000110.aspx](http://www.uab.edu/policies/content/Pages/UAB-HS-POL-0000110.aspx)

## TECHNOLOGY GUIDELINES

### COMPUTER AND NETWORK RESOURCES (ACCEPTABLE USE)

[www.uab.edu/policies/content/Pages/UAB-IT-POL-0000004.aspx](http://www.uab.edu/policies/content/Pages/UAB-IT-POL-0000004.aspx)

### COMPUTER SOFTWARE COPYING AND USE

[www.uab.edu/policies/content/Pages/UAB-IT-POL-0000028.aspx](http://www.uab.edu/policies/content/Pages/UAB-IT-POL-0000028.aspx)

## **INCLUSIVENESS**

### **EQUAL OPPORTUNITY AND DISCRIMINATORY HARASSMENT**

[www.uab.edu/policies/content/Pages/UAB-BT-POL-000052.aspx](http://www.uab.edu/policies/content/Pages/UAB-BT-POL-000052.aspx)

## **RESEARCH AND SCHOLARLY ACTIVITIES**

### **ETHICAL STANDARDS IN RESEARCH AND OTHER SCHOLARLY ACTIVITIES**

[www.uab.edu/policies/content/Pages/UAB-RA-POL-0000263.aspx](http://www.uab.edu/policies/content/Pages/UAB-RA-POL-0000263.aspx)

### **PATENT (INTELLECTUAL PROPERTY)**

[www.uab.edu/policies/content/Pages/UAB-RA-POL-0000115.aspx](http://www.uab.edu/policies/content/Pages/UAB-RA-POL-0000115.aspx)

### **FIREARMS, AMMUNITION, AND OTHER DANGEROUS WEAPONS**

[www.uab.edu/policies/content/Pages/UAB-HR-POL-0000257.aspx](http://www.uab.edu/policies/content/Pages/UAB-HR-POL-0000257.aspx)

*Note: Additional university policies may be located by searching the UAB Policies and Procedures Library available online at [www.uab.edu/policies/Pages/default.aspx](http://www.uab.edu/policies/Pages/default.aspx).*

## SECTION 3 – DEPARTMENTAL POLICES

### MISSION

The UAB Nuclear Medicine Technology Program is dedicated to providing a quality master's level program by offering didactic and clinical coursework in a curriculum that is designed to prepare students to become competent and productive technologists. The program also serves the profession through its offering of continuing education activities and educational products.

### GOALS

1. Provide students with the knowledge and skills necessary to secure employment as an entry-level nuclear medicine technologist.
2. Provide students with the knowledge necessary to pass national certification.
3. Provide health care employers with competent graduates.
4. Offer educational activities and materials to the health care community.
5. Provide help for students with future graduate school request.

### STUDENT LEARNING OUTCOMES

1. Knowledge required for entry level practice.
2. Cognitive/Psychomotor skills required for practice
3. Application of knowledge to practice in field of nuclear medicine technology
4. Apply concepts of nuclear medicine toward a non-thesis research project resulting in a poster, paper, abstract, or peer-reviewed end product.



# FACULTY



**Norman E. Bolus, MSPH, MPH, CNMT, FSNMMI –TS**

Program Director and Assistant Professor

Department of Clinical & Diagnostic Sciences

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Birmingham, AL 35294

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[bolusn@uab.edu](mailto:bolusn@uab.edu)

Norman Bolus is the Program Director and an Assistant Professor for the UAB Master of Science in Nuclear Medicine Technology as well as the Interim-Program Director for the UAB Master of Science in Health Physics. He was in clinical practice for 3 years as a staff nuclear medicine technologist prior to joining the UAB School of Health Professions. He has served in many capacities for the program as lab instructor, teacher, assistant professor and clinical coordinator before assuming the role of program director in 2007. Mr. Bolus received his undergraduate Bachelor of Science degree in Biology/Chemistry in 1988 and a BS degree in Nuclear Medicine Technology in 1989 from UAB. He also obtained a Master in Public Health in Occupational Health and Safety from UAB in 1998 and has an additional Master of Science degree from the UAB School of Public Health in Environmental Toxicology. He is active member of the Society of Nuclear Medicine and Molecular Imaging (SNMMI) and the SNMMI - Technologist Section (SNMMI-TS) and was the Editor-in-Chief of the Journal of Nuclear Medicine Technology from January 2012 through December 2017. He is a past president of the SNMMI-TS. He is also a past president of the Southeastern Chapter of the SNMMI-TS and received The Marshall Brucer Award in October 2017 from the SECSNMMI for distinguished service. He is a two time past president of the Alabama Society of Nuclear Medicine and currently serves as its Associate Treasurer.

**Courses Taught:** Introduction to Clinical Nuclear Medicine, Patient Care, Instrumentation, Radiation Biology, Radiation Safety, Procedures and Radiopharmacy along with assisting in NMT labs.



**Elizabeth Cloyd, BS, R.T.(R)(CT)(MR)**

Instructor

Department of Clinical and Diagnostic Sciences

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B.S. (Radiologic Technology) Bluefield State College. CT/MRI Manager for Brookwood Medical Center. Adjunct Instructor for the UAB Nuclear Medicine Technology Program. Areas of instruction include Computed Tomography Procedures, Magnetic Resonance Imaging, and Cross-sectional Anatomy.



**Remo George, PhD, ABSNM, CNMT(NMTCB)**

Assistant Professor

Department of Clinical and Diagnostic Sciences

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Remo George is an Assistant Professor in the UAB Nuclear Medicine Technology Program. He was in clinical practice for over 10 years in Indiana, Michigan & India prior to joining the school of health professions as a faculty member. He has extensive experience in nuclear medicine procedures, radiopharmaceuticals, instrumentation, and PET applications. He is also a U.S. Nuclear Regulatory Commission approved Medical Radiation Safety Officer.

Mr. George received his undergraduate Bachelor of Science degree in Biological sciences (Zoology, Botany & Biochemistry) (1994) and his Master of Science degree in Biophysics (1996), both from Mahatma Gandhi University, India. Thereafter, he went on to obtain his post baccalaureate diploma in Nuclear Medicine Technology from the Radiation Medicine Center at the Bhaba Atomic Research Center, University of Mumbai, India (1998). He is also concurrently working towards a PhD in Biochemistry & Molecular Genetics at the University of Alabama at Birmingham. His research interest is in the use of antisense molecular beacons for the detection and attenuation of latent mycobacteria.

**Courses taught:** Nuclear Medicine Instrumentation I, Nuclear Medicine Instrumentation II, Nuclear Medicine Procedures I, Nuclear Medicine Procedures II, Radiation Protection & Biology, Regulatory Issues



**Krystle W. Glasgow, MIS, CNMT, NMTCB(CT), NMAA, FSNMMI-TS**

Instructor, Clinical Coordinator

Department of Clinical and Diagnostic Sciences

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[krystlew@uab.edu](mailto:krystlew@uab.edu)

Krystle Glasgow is the clinical coordinator for the UAB Nuclear Medicine Technology Program. She was in clinical practice for 5 years prior to joining the School of Health Professions. Mrs. Glasgow received her undergraduate Bachelor of Science degree in Nuclear Medicine Technology with a concentration in Computed Tomography in 2010 from UAB. She obtained a Master of Imaging Science at The University of Arkansas for Medical Science in Little Rock Arkansas. She is a certified Nuclear Medicine Technologist and also a Certified Nuclear Medicine Advanced Associate (NMAA). She is an active and contributing member of the Alabama Society of Nuclear Medicine and the Society of Nuclear Medicine and Molecular Imaging, She awarded a Fellow of the Technologist Section in 2020.

**Courses taught:** Clinical Practice I, Clinical Practice II, Clinical Practice III, Intro to Nuclear Medicine, Patient Care and Communication Skills, Medical Radiation Physics Lab, Nuclear Medicine Instrumentation I, Nuclear Medicine Instrumentation II, Procedures I, Procedures II, Analysis of Scientific Publication, Regulations/Radiation Protection/Biology, CT Clinical Practice and MR Clinical Practice





**Muhammad Maqbool, PhD, MS, MSc**

Associate Professor

Department of Clinical and Diagnostic Sciences

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Muhammad Maqbool is an Associate Professor for the Health Physics Program. Prior to joining UAB in 2017, he worked as an Associate Professor of Physics at Ball State University, Indiana for 9 years. His first degree came from the University of Peshawar, Pakistan, in 1994. In 1998, he received his MS degree in Medical & Radiation Physics from the University of Birmingham, UK and his PhD degree in Physics from Ohio University, USA, in 2005. Dr. Maqbool has published over 5 dozen peer-reviewed research paper and book chapters in the areas of Condensed Matter Physics, Photonics, Health Physics and Biophotonics. In 2016, he was awarded a US Patent for his invention of a Titanium infrared microlaser on optical fiber. He serves on the editorial board of journals Nanoscale Research Letters and Global Journal of Advanced Radiation Research. He is a member of various professional organizations, including Health Physics Society, American Physical Society, Materials Research Society and Indiana Academy of Science.

**Courses taught:** Principles of Health Physics, Physics of Diagnostic Imaging, Principles of Dosimetry, Nonionizing Radiation, Advanced Radiation Biology, and Non-Thesis Research

## ADMINISTRATIVE STAFF

The Department of Clinical & Diagnostic Sciences has a centralized staff team that supports all CDS programs. For student questions, please contact the CDS Receptionist:

(205) 975-4CDS (4237)

[ASKCDS@uab.edu](mailto:ASKCDS@uab.edu)

# ADVISORY BOARD

## **Baptist Medical Center-Princeton**

James Nance, CNMT

701 Princeton Avenue SW, Birmingham, AL 35211

## **Birmingham VA Medical Center**

Denois Lockett, RT(N)

700 19th Street South, Birmingham, AL 35233

## **Brookwood Diagnostic Cardiology Center**

Cassandra Fuqua

3980 Colonnade Parkway, Birmingham, AL 35243

## **Brookwood Medical Center**

Jennifer Potts, CNMT, BS

2010 Brookwood Medical Center Drive, Birmingham, AL 35209

## **Cardinal Health**

James E. Underwood, BS, RPh

1218 3rd Avenue South, Birmingham, AL 35233

## **Cardiology P.C.**

Susan Hunt, CNMT

Professional Bldg, 701 Princeton Avenue SW, Birmingham, AL 35211

## **Children's Hospital of Alabama**

Sharon Jordan, CNMT

1600 7th Avenue South, Birmingham, AL 35233

**Cullman Regional Medical Center**

Carmen Brown, RT(R), CNMT

PO Box 1108, 1912 AL HWY 157, Cullman, AL 35055

**Decatur Morgan HH Hospital**

Halie Stephenson, CNMT

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**Grandview Medical Center**

Richard Croom, RT(R), CNMT

3690 Grandview Parkway, Birmingham, AL 35243

**Heart South Cardiovascular Group, PC**

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1022 First Street North, Ste. 500, Alabaster, AL 35007

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**Shelby Baptist Medical Center**

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2728 10<sup>th</sup> Avenue South, Suite 300, Birmingham, AL 35205

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**UAB Advanced Imaging Center**

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**University of Alabama Hospital**

David Kynard, CNMT

619 20th Street South, Birmingham, AL 35233

**Walker Baptist Medical Center**

Brett Black, CNMTUS Highway 78, PO Box 3547, Jasper, AL 35502

**Walker Medical Diagnostics, LLC**

Jackie Lee, RT, CNMT

1450 Jones Dairy Road, Jasper, AL 35501

# RESEARCH ADVISORY COMMITTEE

Recognizing a need for a pool of mentors for both the UAB MSNMT Program and our new Health Physics Program, which currently is under the umbrella of the MSNMT Program, we started a research advisory committee. This committee includes the following people:

Dr. Donald Gordon, MD, chair of committee, retired nuclear cardiologist

Dr. Jon Baldwin, DO, Associate Director Radiology Residency Program, UAB

Dr. Luvenia Bender, MD, Medical Director of the UAB MSNMT Program

Mr. Norman Bolus, MSPH, MPH, CNMT, FSNMMI-TS, Director UAB MSNMT

Dr. Emily Caffrey, PhD, Health Physics Consultant, UAB

Dr. Alan Eberhardt, PhD, Professor, Associate Chair UAB Engineering Dept.

Dr. Remo George, PhD, UAB MSNMT Program Assistant Professor

Ms. Krystle Glasgow, MIS, CNMT, NMTCB(CT), NMAA, UAB MSNMT Program

Dr. Suzanne Lapi, PhD, Director UAB Cyclotron Facility

Dr. Muhammad Maqbool, PhD, MS, MSc, Associate Professor UAB MSHP

Dr. Jonathan McConathy, MD, PhD, Director and associate prof., UAB Hospital

Dr. Sergey Mirov, PhD, Professor of Physics, UAB

Dr. Janis O'Malley, MD, Professor, UAB Hospital

Dr. Sharon White, PhD, Assoc. Professor, Chair of the UAB Rad Safety Comm.

Dr. Michael Yester, PhD, Physicist UAB Hospital

# NMT CLINICAL SITES

Clinical education is a major component of the nuclear medicine technology professional phase program. This allows the student to get first hand and hands on experience in the clinical setting which allows the students to get real world practical experience as part of their overall education. This enables the student to become an entry level technologist by the time of graduation through completing documented clinical competencies and experiences.

The following Alabama facilities serve as clinical practice sites:

- Baptist Medical Center Princeton, Birmingham
- Brookwood Diagnostic Cardiology Center, Birmingham
- Brookwood Medical Center, Homewood
- Cardinal Health Nuclear Pharmacy, Birmingham
- Cardiology P.C., Birmingham
- Children’s Hospital, Birmingham
- Cullman Medical Center, Cullman
- Decatur Morgan HH Hospital, Decatur
- Dept. of Veterans Affairs Medical Center, Birmingham
- Grandview Medical Center, Birmingham
- Heart South Cardiovascular, PC, Alabaster
- Image South PET Center, Homewood
- Shelby Baptist Medical Center, Alabaster
- St. Vincent’s East, Birmingham
- St. Vincent’s PET, LLC, Birmingham
- The Kirklin Clinic – Cardiology, Birmingham
- UAB Advanced Imaging Center, Birmingham
- UAB Hospital, Birmingham
- UAB Medical West, Bessemer
- Walker Baptist Medical Center, Jasper
- Walker Medical Diagnostics, LLC, Jasper



**UAB Kirklin Clinic**

# PROFESSIONAL PHASE CURRICULUM

## Prerequisite Courses (40 hours)

- Pre-calculus Trigonometry
- Introductory Chemistry I & II
- Pathophysiology
- Human Anatomy and Physiology
- First Aid and BLS CPR
- Statistics
- College Physics I & II
- Medical Terminology
- Health Care Systems

Course Number/Title	
<b>First Year - Fall 2020</b>	
NMT 602 Intro to Clinical Nuclear Medicine, Patient Care & Communication Skills	3
NMT 610 Medical Radiation Physics & Lab	4
NMT 621 Nuclear Medicine Instrumentation I & Lab	4
NMT 631 Nuclear Medicine Anatomy and Physiology – Procedures I	4
CDS 610 Research Design & Stats	3
<b>Total</b>	<b>18</b>
<b>First Year – Spring 2021</b>	
NMT 632 Nuclear Medicine Anatomy & Physiology – Procedures II	4
NMT 461 Regulations, Radiation Protection/Biology & Lab	4
NMT 691 Clinical Practice I	3
CDS 505 Professional Skills	1
CDS 625 Analysis of Scientific Publication	3



<b>Total</b>	<b>15</b>
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<b>First Year – Summer 2021</b>	
NMT 602 Cross-Sectional Anatomy	3
NMT 622 Nuclear medicine Instrumentation II	3
NMT 623 Computed Tomography	3
NMT 692 Clinical Practice II	5
HA 650 Management and Leadership Skills for Clinical Professionals	3
<b>Total</b>	<b>18</b>
<b>Second Year – Fall 2021</b>	
NMT 660 Radiopharmacy, Pharmacology & Lab	3
NMT 693 Clinical Practice III	7
NMT 698 Non-Thesis Research	4
<b>Total</b>	<b>14</b>
<b><i>Total Hours for Professional Phase Program</i></b>	<b>65</b>

Students may choose from two concentrations: Computed Tomography (CT) or Magnetic Resonance Imaging (MRI). Courses for each concentration will begin in the summer term of the first year of the professional phase of the NMT curriculum.

### **CT Concentration Courses**

#### **SECOND YEAR**

##### **Summer**

NMT 605 Cross-sectional Anatomy (3) – Program Course

NMT 623 Computed Tomography (3) – Program Course

##### **Fall**

NMT 633 Computed Tomography Procedures (3) – Elective

##### **Spring**

NMT 694 Computed Tomography Clinical Practice (10) – Elective

### **MRI Concentration Courses**

#### **FIRST YEAR**

##### **Spring**

NMT 624 MRI Physics and Instrumentation (3) – Elective

##### **Summer**

NMT 601 Introduction to MRI Clinic (2) – Elective

NMT 605 Cross-sectional Anatomy (3) – Program Course

#### **SECOND YEAR**

##### **Fall**

NMT 634 MRI Scanning & Sequence Optimization (3) – Elective

##### **Spring**

NMT 695 MRI Clinical Practice (12) – Elective

## STUDENT RESPONSIBILITIES

- Maintain academic integrity by refraining from cheating. Incidents of cheating among others should be reported if and when it is witnessed.
- Check email on a daily basis.
- Turn off all cell phones and/or beepers prior to beginning class.
- Report to all class meetings on time.
- Bring all course materials to class.
- Assist in maintaining a constructive classroom environment by refraining from inappropriate disruptions or outbursts. Respectful behavior toward instructors, classmates, and guests is expected.
- It is recommended that you join the Society of Nuclear Medicine & Molecular Imaging as a student member.
- It is recommended that you join the Alabama Nuclear Medicine Society as a student member.
- Have access to a computer with MS Office software for participation in on-line work (software available at UAB bookstore at reduced cost to students.)
- Refer to the Student Policies and Procedures Handbook when in need of program, clinical and or didactic policy information. Failure to meet student responsibilities may lead to counseling, reprimand and/or probation.

**Due to the fact that graphing calculators are not allowed to be used on the Nuclear Medicine Technology Certification Board exam, they are not allowed for use in classes within the NMT program. A non-graphing scientific calculator can be used.**

## PROGRAM GRADING POLICIES

1. The following grading scale is utilized in all nuclear medicine technology courses with the prefix NMT. It is to be pointed out that this is based on an 8 point scale rather than a 10 point scale. Also, board exams require a 75 or better to pass.

A = 92 – 100, B = 84 – 91, C = 75 – 83, F = < 75

2. A current student who receives a grade less than 75 in any required course while admitted to the nuclear medicine technology program will be dismissed from the program unless there are mediating circumstances. These circumstances must be extreme in order to be considered.

In the case of extreme circumstances, the student will be suspended from the program rather than expelled, and must wait until the next time the course in which the failing grade was made is offered again. The student will then be allowed to take the course again. Under the recommendation of the program director, the student may be required to take remedial courses prior to repeating a nuclear medicine technology course. If the student passes the course, then the student may petition the program director for re-entry into the program. If the class size warrants, the student MAY be allowed to re-enter the program at the discretion of the program director. Re-entry into the Nuclear Medicine Technology program is NOT guaranteed. If the student takes the course again and still fails to make a 75 or greater, the student will be expelled from the program. The student may reapply to the program, and must complete the full application process again and enter the program as a new student. Entry into the program is still not guaranteed, but will be on a competitive basis with the other applicants.

3. Cheating: If a student is caught and proven to be cheating, the student is in violation of the UAB Honor Code (found on the Home Page under Course Information) and will be subject to the UAB policies on Academic Misconduct. At the least, the student will receive a zero for the exam or assigned work and will be put on Academic Probation (see Program Policies and Procedures on Academic Misconduct/Probation). If placed on Academic Probation, a second infraction OF ANY KIND will result in dismissal from the program.
4. Plagiarism: All papers and assignments must be the original work of that student, or have the work of another in quotation marks with proper reference notations immediately following the direct quote. If a student is proven to have plagiarized another individual's work, claiming that work as his or her own, the student is in violation of the UAB Honor Code (found on the Home Page under Course Information) and will be subject to the UAB policies on Academic Misconduct.

# TEXTBOOK LIST

2019-2020

The following books must be purchased for use during participation in the program. This list is subject to change. Students are required to use the i>clicker software for all of the following courses.

9780763766382 (Provided by program- on loan)

## FALL

NMT 602

*Intro to Radiography & Patient Care*, 6th Edition  
Adler & Carlton  
Saunders  
978-1437716467

NMT 621/622 & NMT 631/632

*Nuclear Medicine and PET/CT Technology and Techniques*, 8th Edition  
Waterstaram-Rich and Gilmore  
Mosby-Elsevier  
9780323356220

NMT 610

*Medical Imaging Physics*  
Hendee and Ritenour  
Wiley-Liss 4th Edition, 2002  
9780471382263

NMT 631 & NMT 632

*Nuclear Medicine Technology Procedures and Quick Reference*  
Pete Shackett  
Lippincott, Williams & Wilkins  
9780781774505

NMT 621

*Physics in Nuclear Medicine*, 4th Edition  
Sorenson, Phelps, and Cherry  
9781416051985

## SPRING

NMT 622/NMT 632

*Nuclear Cardiology Technology*, 2nd Edition

Johnson, Etal  
Society of Nuclear Medicine & Molecular Imaging

(Provided by program-on loan)

NMT 621

*Nuclear Medicine and PET/CT Technology and Techniques*, 7th Edition  
9780323071925

NMT 621/NMT 622

*Nuclear Medicine Instrumentation*, 2nd Edition  
Prekeges, Jennifer

NMT 632

*Quick and Accurate 12-lead ECG Interpretation*,  
4th Edition, Dale Davis

Lippincott Williams & Wilkins

9781582553795

NMT 641

*Essentials of Radiation Biology and Protection*,  
2<sup>nd</sup> Edition

Forshier, S., Delmar

Thompson Learning, 2002

978142812173

NMT 641

*Radiation Protection in the Health Sciences*  
(with problem solutions manual), 2nd Edition

Noz and Maguire

World Scientific

9789812705976

NMT 641

*Guide for Diagnostic Nuclear Medicine and  
Radiopharmaceutical Therapy*

Jeffery A. Siegel

Society of Nuclear Medicine

9780972647823

**SUMMER**

NMT 605

*Sectional Anatomy for Imaging Professionals,*

2nd Edition (or newest edition)

Lorrie L. Kelly and Connie M. Petersen

Mosby

0323020038

Springer-Verlag New York, Inc.

9781441958594

NMT 698

*Review of Nuclear Medicine Technology, 5th Edition*

(Provided by program- on loan)

NMT 605 (Recommended)

*Workbook of Sectional Anatomy for Imaging Professionals, 2nd Edition (or newest edition)*

Lorrie L. Kelly and Connie M. Petersen

Mosby

0323020046

NMT 622 (See NMT 621)

*Nuclear Medicine and PET/CT Technology and Techniques, 7th Edition*

9780323071925

NMT 623

*Computed Tomography: Physical Principles, Clinical Applications and Quality Control,*

3rd Edition

Euclid Seeram, W. B. Saunders

9781416028956

**SECOND YEAR FALL**

NMT 660

*Fundamentals of Nuclear Pharmacy, 6th Edition*

Gopal B. Saha

# UAB AND PROGRAM ASSESSMENTS AND EVALUATIONS

The student is requested to do several types of assessments throughout their participation within the program. A list of those assessments and a brief explanation are below.

By completing the evaluations of the program, the program can identify areas in need of improvement or enhancement in order to better meet the educational needs of the student.

1. Course / Instructor Evaluation
  - This is done by the student electronically at the completion of each course at the end of each semester.
  - While the student is not required to do the evaluation, the information is vital for the instructor to use to improve the course.
  - The evaluations are anonymous.
  
2. Student End-of-Term Evaluation
  - This is done at the end of each semester the student is enrolled in the clinic.
  - The student is requested to submit a self-assessment of how they perceived their performance was in clinic for that semester.
  - If necessary, a meeting with the student and the program director will be arranged to work out any identified problem areas.
  
3. Exit Interview
  - This is done at the end of the last semester of the program.
  - The student is requested to do an evaluation of the program’s strengths and weaknesses as perceived by the student.
  - The evaluation is anonymous.

## **Nuclear Medicine Technology Certification Board Annual Report – UAB NMT Program Results**

First Time Taking the Exam Upon Completion of UAB NMT Program Results:

Year	UAB NMT Program	National Average for Equivalent Program Graduates	Overall National Average for All Examinees
2019	50%	85.19%	79.02%
2018	100%	87.72%	81.91%



2017	N/A	N/A	N/A
2016	82.4%	88.9%	83.15%
2015	92.3%	90.99%	86.76%
2014	89%	89.6%	87.6%
2013	100%	90.78%	89.90%
2012	92.80%	92.40%	88.20%
2011	94.4%	92.5%	91.4%

## ACCREDITATION

Accreditation: The NMT program is accredited by:

The Joint Review Committee on Educational Programs in Nuclear Medicine Technology (JRCNMT).

### JRCNMT

2000 W. Danforth Road

Suite 130, #203

Edmond, OK 73003

Phone: 405.285.0546

Fax: 405.285.0579

[jrcnmt@coxinet.net](mailto:jrcnmt@coxinet.net)

[www.jrcnmt.org](http://www.jrcnmt.org)

“The Master of Science in Nuclear Medicine Technology degree program is designed to lead to a professional certification. *There are two national professional board exams, one through the Nuclear Medicine Technology Certification Board (NMTCB) and the other with The American Registry of Radiologic Technologists (ARRT), resulting in a credential of CNMT or RT(N) respectively. In addition, students may elect to pursue elective coursework that can lead to secondary-post primary certification in Computed Tomography (CT) and/or Magnetic Resonance Imaging (MRI). CT certification is either through the NMTCB which results in a credential of NMTCB (CT) or through the ARRT with a credential of RT(CT). MRI certification is through the ARRT resulting in a credential of RT(MR). Specific licensure requirements for each modality still vary from state to state. UAB is working to develop an online, publicly-accessible database to assist in providing this state-by-state information. In the meantime, if*

you are interested in learning about potential professional licensure requirements in your state for a specific degree program, please contact UAB State Authorization at [stateauth@uab.edu](mailto:stateauth@uab.edu), or call Dr. Lisa Reburn at (205) 934-3258.”

**Credentials Conferred:** Post Baccalaureate degree and a certificate of completion are awarded by the University of Alabama at Birmingham

**Board Certification:** Graduates of the program are eligible to apply for the certification examination offered by both the Nuclear Medicine Technology Certification Board (NMTCB) or the American Registry of Radiological Technologists (ARRT)

**Nuclear Medicine Technology Certification Board**

3558 Habersham at Northlake

Building I

Tucker, GA 30084

<http://www.nmtcb.org/root/default.php>

**Phone:** (404) 315-1739

**Toll Free:** (800) 659-3953

**Fax:** (404) 315-6502

**E-mail:** [board@nmtcb.org](mailto:board@nmtcb.org)

**ARRT**

1255 Northland Drive

St. Paul, MN 55120

<https://www.rrt.org/>

**Phone:** (651) 687-0048

**Fax:** (651) 681-3299

## STUDENT SEIZURE PROTOCOL

1. If a student has a seizure and comes out of the seizure physically unharmed and appears to be fine after the event:
  - Do not call 911.
  - Do not write up an incident report.
  - Make sure the student is ok.
2. If a student has a seizure and is physically harmed but seems fine otherwise (i.e. a fall occurs, the student bumps their head etc.):
  - Write up the incident as a “not a medical emergency” incident (see item 5 on the attached incident reporting policy).
  - Notify the program director immediately: (205) 934-3427 or (205) 975-4237
  - Transport the student to student health (1714 Ninth Avenue South) with a medical authorization form. This may be done by faculty or staff.

3. If the student has a seizure and is unresponsive or alert but not coherent:
  - Call 911.
  - Write up the incident as a “major medical injury” (See item one on the attached incident reporting policy).
  - Accompany the student to the ER to present the completed medical authorization form. This may be done by faculty or staff.
  - Notify the program director immediately.

If this were to occur a medical authorization form and incident report form would need to be completed.

## CLOSING NOTIFICATIONS

Your safety should always take precedence to official closings. To find out if class cancellation occurs due to bad weather (snow and ice) on an assigned class day use the following official sources:

UAB radio station WBHM 90.3

The UAB Web site at [www.uab.edu](http://www.uab.edu)

BlazerNet at [www.uab.edu/blazernet](http://www.uab.edu/blazernet)

B-Alert System <https://www.uab.edu/emergency/communications-and-information-management/uab-b-alert>

The UAB inclement Weather Hotline at (205) 934-2165

# NMT CODE OF ETHICS

Nuclear Medicine Technologists must strive as individuals and as a group to maintain the highest of ethical standards.

The Principles (SNMMI-TS Code of Ethics) listed below are not laws, but standards of conduct to be used as ethical guidelines by nuclear medical technologists. These Principles were adopted by the Technologist Section and the Society of Nuclear Medicine and Molecular Imaging at the 2004 Annual Meeting. They are standards of conduct to be used as a quick guide by nuclear medicine technologists.

**Principle 1:** The Nuclear Medicine Technologist will provide services with compassion and respect for the dignity of the individual and with the intent to provide the highest quality of patient care.

**Principle 2:** The Nuclear Medicine Technologist will provide care without discrimination regarding the nature of the illness or disease, gender, race, religion, sexual preference or socioeconomic status of the patient.

**Principle 3:** The Nuclear Medicine Technologist will maintain strict patient confidentiality in accordance with state and federal regulations.

**Principle 4:** The Nuclear Medicine Technologist will comply with the laws, regulations, and policies governing the practice of nuclear medicine.

**Principle 5:** The Nuclear Medicine Technologist will continually strive to improve their knowledge and technical skills.

**Principle 6:** The Nuclear Medicine Technologist will not engage in fraud, deception, or criminal activities.

**Principle 7:** The Nuclear Medicine Technologist will be an advocate for their profession.

# **NMT PROGRAM DRUG TESTING POLICY**

In addition to the SHP Drug Testing Policy, the NMT program reserves the right to test any NMT student, with cause, at any time while they are enrolled in the program under the direction of either the Program Director or Clinical Coordinator.

# ESSENTIAL REQUIREMENTS

The following skills are needed by applicants to the Nuclear Medicine Technology Program. Applicants and students should possess these abilities, or with the help of compensatory techniques and/or assistive devices, be able to demonstrate the ability to become proficient.

- Manual dexterity:      Use of extremities for patient care purposes
- |               |           |           |            |
|---------------|-----------|-----------|------------|
| wrists (both) | grasping  | pulling   | twisting   |
| hands (both)  | fingering | holding   | (rotation) |
| arms (both)   | pushing   | extending | cutting    |
- Sensation:              palpation              auscultation              percussion
- capable of hearing voices of normal range in the presence of background noise
- Visual Perception:      depth acuity (corrected to 20/40)
- ability to distinguish shades of gray/color
- Physical strength:      to support another person
- to position another person
- to transfer/ambulate with walker, cane, crutches, bed, wheelchair
- to stand for long periods of time
- to perform CPR; resuscitation
- to walk at a rapid pace for eight hours
- to lift 10-15 pounds
- Ability to operate and maintain equipment (e.g., nuclear medicine instrumentation, ventilator, electronic monitor, etc.)
- Interpersonal skills:      able to function (consult, negotiate, share) as part of a team
- able to use oral communication skills
- able to respond to others' requests
- willing to accept direction and supervision

Perform duties while under stress.

## STUDENT AWARDS & SCHOLARSHIPS

### **Scholarships**

Once the student is admitted to the Nuclear Medicine Technology Program, the student becomes eligible to apply for specific scholarships offered by the School of Health Professions as well as scholarships offered through the Society of Nuclear Medicine & Molecular Imaging (SNMMI), and the Alabama Society of Nuclear Medicine (ASNM).

#### ***Society of Nuclear Medicine & Molecular Imaging (SNMMI)***

The Society of Nuclear has various student and professional scholarships available. Applications can be found on the SNM website: <http://www.snmmi.org/>. To apply the student must be a member of the SNM. There are student memberships available.

#### ***Alabama Society of Nuclear Medicine (ASNM)***

The Alabama Society of Nuclear Medicine also has various student and professional scholarships available. Applications can be found on the ASNM website: [www.alabamanucmed.org](http://www.alabamanucmed.org). To apply the student must be a member of the ASNM.

#### ***Michael Thompson Scholarship Fund***

Professor Emeritus Michael Alford Thompson, Professor of Medical Physics for 27 years at the University of Alabama at Birmingham (UAB) School of Health Professions, suddenly and unexpectedly passed away on January 2, 2009 at the age of 59. He retired in 2007 from the faculty of the UAB Nuclear Medicine Technology Program after suffering with Parkinson's disease for 7 years. His 30 year career at UAB began in 1977 as a Radiation Safety Monitor in the Occupational Health Safety Office. He transferred to the School of Health Professions in April of 1980 and began utilizing teaching experience he obtained at Francis Marion College in Florence, South Carolina, where he taught Physics and Mathematics from 1974-1977. In May 1986, just six short years after joining the faculty, he was honored with the School of Health Professions highest faculty award, the Joseph F. Volker Outstanding Faculty Award. He received the President's Excellence in Teaching Award in May of 1993 and twice (1995 and 1997) was a finalist for the highest faculty award given by UAB, The Ellen Gregg Ingalls / UAB National Alumni Award.

These faculty awards are a testament to Michael Thompson's reputation as an outstanding educator. Numerous former students were led to the field of Health Physics through Professor Thompson's efforts. He continuously promoted the field and would personally hand out application forms to students he thought had any interest in health physics. As a long-time

member he would sign off on the applications and personally mail them into the society. Many former students went on from the UAB NMT Program to pursue a Health Physics degree at Georgia Tech with recommendations provided by Professor Thompson.

In addition to being an outstanding educator for the School of Health Professions and promoter of the field of health physics, Professor Thompson created and marketed many educational materials through the years. His Principles of Radiation Protection Video Series has been sold internationally. His most recent undertaking has been educational PowerPoint CD packages which have included topics on nuclear instrumentation, radiologic physics, radioactive decay processes, and radiation protection. In 1994, he led the effort for publication of a text book for radiography entitled "Principles of Imaging Science and Protection" from the W.B. Saunders Company.

Professor Emeritus Michael Thompson was beloved by the many students he taught over his 30 year career and will be remembered for being a kind, gentle, and generous person who gave all he could to his students to help them in the learning process. Being a talented educator and a dedicated professor devoted to life-long learning, he will be greatly missed by all who were fortunate enough to be his students.

In an effort to honor the contributions Professor Thompson made during his career at UAB, the NMT Program will establish a student scholarship in his name as a lasting remembrance of Professor Emeritus Michael Thompson.

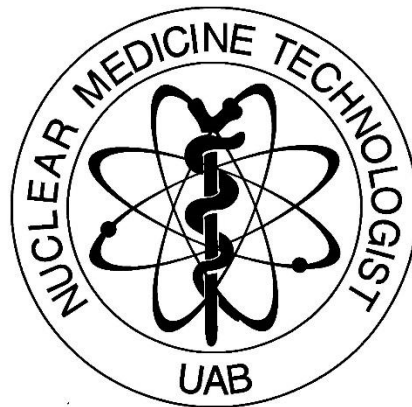
#### ***M. May Williams memorial Scholarship***

M. May Williams was the first program director of the UAB Radiography program. Upon her passing, a memorial scholarship was named in her honor. This scholarship is used for the CT and MRI concentrations associated with the NMT program. Eligible students will be notified of the application process in the clinical term associated with the concentrations.



**SECTION 4: CLINICAL EDUCATION MANUAL**

**CLINICAL EDUCATION MANUAL**  
**NUCLEAR MEDICINE TECHNOLOGY PROGRAM**  
**&**  
**COMPUTED TOMOGRAPHY/MAGNETIC**  
**RESONANCE ELECTIVES**



# STUDENT TECHNOLOGIST RESPONSIBILITIES

1. Incorporate oneself into the individual department routine. Starting times, coffee breaks and lunch periods are scheduled according to scheduling, staffing needs and constraints, and the educational needs of the student.
2. Consistently attend all scheduled experiences on time. If absence or lateness is unavoidable, both the clinical instructor and the NMT office (975-4237) or (934-3427) must be contacted within 30 minutes of the scheduled starting time. (Names and telephone numbers of clinical instructors appear on pages 58-62.)

The supervising technologist at each clinical site will set the starting time for the individual student. The starting time may change during the clinical rotation to afford the student certain clinical experiences. The student must be present in clinic for 8 hours each day, excluding lunch and coffee breaks.

3. Wear nametags and personal dosimetry monitoring devices provided.
4. Wear clinical attire as required by the participating institution. If none is required, appropriate professional attire is still expected. (See CDS Dept. Dress Code page 31 and Clinic Dress Code page 65)
5. Wear disposable gloves when handling radioactive materials.
6. Observe standard precautions when handling patients or patient specimens.
7. Demonstrate professional behavior at all times by:
  - a. Refraining from criticizing and/or comparing hospitals, technologists or other students.
  - b. Refraining from any discussion concerning the patient with colleagues in patient areas and/or in any way, which is not pertinent or relevant to the procedure or patient care.
  - c. Taking care with any words spoken within the patient's hearing range.
  - d. Refraining from extraneous or boisterous conversation while any procedure is in progress.
  - e. Avoiding the display of emotional reactions (distaste, disgust, surprise) in the presence of patients.
  - f. Displaying concern, patience and interest in the patient.
  - g. Maintaining confidentiality of patient records and/or any information offered by the patient.
  - h. Refraining from discussing one patient with another.
  - i. Refrain from using cell phones during assigned clinical times. (See Cellular Phone & Electronic Devices Policy page 67)
8. Work under the supervision of a nuclear medicine technologist or other trained personnel.
9. Demonstrate professional judgment and responsibility by:
  - a. Observing the rules and regulations of the department.
  - b. Working in an orderly fashion with the assigned clinical instructor.
  - c. Considering consequences before acting.
  - d. Recognizing which decisions require approval.
  - e. Recognizing own limitations and responsibilities in the work situation.
  - f. Adjusting the pace to situation requirements.
10. Assume some responsibility for one's own learning by:
  - a. Utilizing all available resources (e.g., books, journals, charts, health team personnel).
  - b. Using unstructured time wisely.
  - c. Functioning without prodding.

- d. Showing interest by asking questions and seeking new learning experiences.
  - e. Accepting constructive criticism gracefully.
  - f. Evaluating one's own performance and checking those perceptions with instructors.
11. Maintain a clinical journal and enter into it a daily report of clinical experiences.

Program faculty will review students' journals during each clinic visit to ascertain that students are receiving a comprehensive clinical experience and are participating at a level commensurate with their clinical experience.

12. Adhere to the policies and procedures described in this handbook. (See Failure to Follow Policies/Procedures, page 69)
13. Evaluate the clinical experience received at a particular site at the conclusion of each rotation. (See Student Evaluation of Clinical Experience, page 70)

## NUCLEAR MEDICINE TECHNOLOGY PROGRAM

### CLINICAL AFFILIATES

1. **Baptist Medical Center-Princeton**

Nuclear Medicine Department

701 Princeton Avenue SW

Birmingham, AL 35211

**(205) 783-3020**

\*James Nance, MSRS, CNMT

Nicholas Hatfield, CNMT

Sharon Berry, CNMT

Donna Barber, CNMT

Sara Mayo, CNMT

Kelly Massey, CNMT

2. **Brookwood Cardiology Diagnostic Center**

3980 Colonnade Parkway

Birmingham, AL 35243

**(205) 795-5033**

\*Cassandra Fuqua, CNMT, NCT

Dwana Yancey, CNMT, NCT

Lisa Wilson, RN

Nikki Ardendale, RN

Aleshka Kerley, CNMT

Stephany Moore, CNMT, NCT

Regan Grimm, CNMT

Tamara Mayhall, RN  
Tonya West, RN  
Hannah Martin, CNMT

3. **Brookwood Medical Center**

Nuclear Medicine Department  
2010 Brookwood Medical Center Drive  
Birmingham, AL 35209

**(205) 877-1354**

\*Jennifer Potts, CNMT  
Elizabeth Kritzberger, CNMT  
Ted Hodnett, CNMT, ARRT  
Jazmine Sharpe, CNMT  
La'Quita Clayton, CNMT

4. **Cardinal Health Nuclear Pharmacy Services**

1218 Third Avenue South  
Birmingham, AL 35233

**(205) 324-3673**

\*James Underwood, PharmD

5. **Cardiology PC**

Professional Building,  
701 Princeton Avenue SW  
Birmingham, AL 35211

**(205) 786-8733**

\*Sue Hunt, CNMT, R.T.(R)(N)(ARRT)  
Jay Roberson, CNMT  
Larry Hyche, CNMT  
Phillip Russell, CNMT  
Nick Munkachy, CNMT  
Stephanie Doran, CNMT

6. **Children's Hospital**

Nuclear Medicine  
1600 7th Avenue South  
Birmingham, AL 35233

**(205) 939-9667**

\*Sharon Jordan, CNMT

Tonya Veitch, CNMT

Evelyn Meza, CNMT

Chasity Townley, CNMT

7. **Cullman Medical Center**

Nuclear Medicine

1912 AL Hwy 157

Cullman, AL 35055

**(256) 737-2799**

\*Carmen Brown, RT, CNMT

Katy Tilley, ARDMS

Jennifer Copeland, RT, ARDMS, CNMT

Cindy Gray, RT, ARDMS, CNMT

Ashley Sisk, RT(CT)ARRT, CNMT

8. **Grandview Medical Center**  
Nuclear Medicine Department  
3690 Grandview Parkway  
Birmingham, AL 35243 **(205) 971-5219**  
\*Richard Croom, CNMT, RT  
Lena Abdoli, CNMT
  
9. **HH Decatur Morgan Hospital**  
1201 7th St. S.E  
P.O. Box 2236  
Decatur, AL 35609 **(256) 341-2545**  
Barbara Moore, CNMT  
Cindy Conway, CNMT  
Sonya Hines, CNMT  
\*Halie Stephenson, CNMT
  
10. **Heart South Cardiovascular Group, PC**  
1022 1st Street North Suite 500  
Alabaster, AL 35007 **(205) 739-2043**  
\* Sylvester Atkinson, CNMT  
Loukisha Collins, CNMT  
Aleshka Kerley, CNMT  
Mary Meechum, CNMT  
Amy Petersen, CNMT
  
11. **The Kirklin Clinic, Cardiology Center**  
2000 6th Avenue South  
Birmingham, AL 35233 **(205) 731-9380**  
\*NaTarsha Brown, CNMT  
Roslyn Sherrod, CNMT  
Nathan Nichols, CNMT  
Frances Beth Baker, CNMT  
Theresa Diane Guarino, CNMT  
David Kynard, CNMT

12. **St. Vincent's East**

Nuclear Medicine Department

50 Medical Park Drive East

Birmingham, AL 35235

**(205) 838-3435**

\*Crystal Garrett, CNMT

Matt Patterson, CNMT, RT

Leigh Ann Burns, CNMT

Cody Sweatman, CNMT

Laura Daily, RN

13. **St. Vincent's PET, LLC**  
2728 10<sup>th</sup> Avenue South, Suite 300  
Birmingham, AL 35205 **(205) 930-2670**  
\*Robert Wynn, BS, CNMT  
Andrew Parmer, RT, CNMT  
Evan Crisp, CNMT
14. **Image South PET Center**  
1 Independence Plaza, Suite 140  
Homewood, AL 35209 **(205) 870-1979**  
\*Retta Hamm, CNMT
15. **Shelby Baptist Medical Center**  
Nuclear Medicine  
U. S. Highway 31  
Alabaster, AL 35007 **(205) 620-8602**  
\* Lisa Moody, RT(R), CNMT  
Diane Guarino, RT(N)  
Brenda Washburn, RT(R), CNMT
16. **UAB Advanced Imaging Center**  
PET Center, 2000 6th Avenue South  
Birmingham, AL 35233 **(205) 801-7561**  
\*Marc Coleman, CNMT  
Kevin McClure, CNMT  
Bobby Jackson  
Lael Gore, CNMT  
Brittney Gray, CNMT
17. **UAB Hospital**  
Molecular Imaging and Therapeutics  
7th Floor-Quarterback Towers  
619 19th Street South,



Birmingham, AL 35233-6835

**(205) 975-8325**

\* David Kynard, CNMT

Victoria Hansen, CNMT

Daniel Yoder, CNMT

Jennifer Hill, CNMT

Jeanette Bythwood, CNMT

Shalin Waterford, CNMT

18. **UAB Medical West**  
Nuclear Medicine  
US Highway 11 South  
Bessemer, AL 35020 **(205) 481-7190**  
\*Tiffany Jennings, CNMT  
Christina Self, CNMT  
Stefane' Glover, CNMT
19. **Department of Veterans Affairs Medical Center**  
Nuclear Medicine Service  
700 19th Street South  
Birmingham, AL 35233 **(205) 933-8101, x 6615**  
\*Denois Lockett, RT(N)  
Amikka Watts, CNMT  
Cassandra Smith, CNMT  
Shantia King, CNMT  
Tracey Britton, CNMT  
Johnathan Crayton, CNMT  
Hong, Lin, CNMT  
**Radiation Safety:** **(205) 933-8101, x 6610**  
\*Kathy Boyd, MS, CNMT  
Kim Holland
20. **Walker Baptist Medical Center**  
Nuclear Medicine Department  
3400 U. S. Highway 78 East  
Jasper, Alabama 35501  
or  
P.O. Box 3547  
Jasper, AL 35502-3547 **(205) 387-4080**  
\*Brett Black, CNMT
21. **Walker Medical Diagnostics, LLC**  
Nuclear Medicine Department  
1450 Jones Dairy Road

Jasper, Alabama 35501

**(205) 295-4100**

\*Jackie Lee, RT, CNMT

Kim James, RT

\*Denotes supervisory personnel

# COMPUTED TOMOGRAPHY CLINICAL AFFILIATES

- 1. Baptist Medical Center South - Montgomery**  
2105 East South Boulevard  
Montgomery, AL 36116 **(334) 286-2386**  
\*Jackie Davis
- 2. Brookwood Medical Center – CT**  
210 Brookwood Medical Center Drive  
Birmingham, AL 35209 **(205) 877-1804**  
\*Dianna McCain
- 3. HH Decatur Morgan Hospital – CT**  
1201 7<sup>th</sup> Street SE  
Decatur, AL 35601 **(256) 341-2540**  
\*Jonathan Proctor
- 4. Marshall Medical Center South**  
2505 AL-1  
Boaz, AL 35957 **(256) 593-8310**  
\* Mark Sweatt
- 5. Princeton Baptist Medical Center – CT**  
701 Princeton Avenue SW  
Birmingham, AL 35211 **(205) 783-3282**  
\*Sherry Pair
- 6. Shelby Baptist Medical Center – CT**  
US Highway 31  
Alabaster, AL 35007  
\* Susan Staniszewski
- 7. UAB Advanced Imaging – CT**  
2000 6<sup>th</sup> Avenue South  
Birmingham, AL 35233 **(205) 801-8890**

\*Gerald Waldrop

8. **UAB Hospital – CT**

619 19<sup>th</sup> Street South

Birmingham, AL 35233

**(205) 934-4831**

\*Yvette Glenn

9. **Department of Veterans Affairs Medical Center – CT**

700 19<sup>th</sup> Street South

Birmingham, AL 35233

**(205) 933-8101, x6723**

\* Warren Dukes

Rainey Varner

10. **Walker Baptist Medical Center – CT**  
3400 US Highway 78 East  
Jasper, AL 35501 **(205) 387-4297**  
\* Kay Laney

11. **Walker Medical Diagnostics, LLC – CT**  
1450 Jones Dairy Road  
Jasper, AL 35501 **(205) 295-4105**  
\*Neal Griffin

## MAGNETIC RESONANCE CLINICAL AFFILIATES

1. **Brookwood Medical Center – MRI**  
2010 Brookwood Medical Center Drive  
Birmingham, AL 35209 **(205) 877-1745**  
\*Dianna McCain

2. **Cullman Regional Medical Center – MRI**  
1912 AL Highway 157  
Cullman, AL 35055 **(256) 737-2186**  
\*Dewayne Denny

3. **Department of Veterans Affairs Medical Center – MRI**  
700 19<sup>th</sup> Street South  
Birmingham, AL 35233 **(205) 933-8101, x4387**  
\*Warren Dukes  
Rainey Varner

4. **Walker Medical Diagnostics, LLC – MRI**  
1450 Jones Dairy Road  
Jasper, AL 35501 **(205) 295-4105**  
\*Neal Griffin

<b>Clinical Site</b>	<b>Phone #</b>	<b>Fax #</b>
BMC Princeton . . . . .	(205) 783-3020	(205)783-7463
Brookwood Medical Center . . . . .	(205) 877-1354	(205) 877-2523
Cardinal Health Nuclear Pharmacy . . . . .	(207) 324-3673	(205) 324-3433
Cardiology, P.C. . . . .	(205) 786-8733	(207) 786-6669
Brookwood Cardiology Diagnostic Center. . . . .	(205) 795-5033	(205) 599-9108
Children's Hospital . . . . .	(205) 939-9667	(205)939-6872
Citizens Baptist Medical Center . . . . .	(256) 761- 4492	
Cullman Medical Center . . . . .	(256) 737-2799	
Grandview Medical Center . . . . .	(205) 971-6275	
HH Decatur Morgan Hospital . . . . .	(256) 341-2545	
Heart South Cardiovascular Group, PC . . . . .	(205) 739-2043	(205) 739-2033
Image South PET Center . . . . .	(205) 870-1979	
Shelby Baptist Medical Center . . . . .	(205) 620-8602	(205) 620-7942
St. Vincent's East . . . . .	(205) 838-3435	(205) 838-3459
St. Vincent's PET, LLC . . . . .	(205) 930-2670	(205) 930-2671
UAB Advanced Imaging, PET Center . . . . .	(205) 801-7561	(205) 801-7562
UAB Hospital . . . . .	(205) 975-8325	(205) 934-5589
UAB Highlands . . . . .	(205) 930-7040	(205) 930-7629
UAB West . . . . .	(205) 481-7190	(205) 481-7788
VAMC . . . . .	(205) 933-8101 (X 6615)	(205) 933-4484
VA (RSO) . . . . .	(205) 933-8101 (X 6610)	
Walker Baptist Medical Center . . . . .	(205) 387-4080	(205) 387-4618
Walker Medical Diagnostics, LLC . . . . .	(205) 295-4100	(205)295-4101

## DOOR TO DEPARTMENT DIRECTIONS

(Some clinic sites do not have door to department directions)

### **Brookwood Medical Center**

On the first day, the student may park in the employee parking deck but will need to state his/her name into the intercom along with the clinic supervisor and department. Go across the street and up the hill.

Enter through the main entrance of the hospital. Take a right and follow the directions to the nuclear medicine department.

**Brookwood Cardiology Diagnostic Center (CVA 280 Location)**

Go to the main entrance. The diagnostic halls are located to the right of main entrance. The entrance to Nuclear Department is on Spect Hall



### **Cardiology PC**

If you park on the street near the ER or in the parking deck across the street from the ER - you should enter the hospital at the door 50 feet to the left of the ER. Take an immediate left when you enter the building. Walk down the ramp and when the tile turns to carpet our door is the first on the right - the

### **Children's Hospital**

If you are coming from campus, you will just follow the "river" on the 2<sup>nd</sup> floor across to the Benjamin Russell Building. When you arrive at the lobby, you will take the glass elevators to the first floor and enter the Imaging doors. Once in the department, there will be signs to the Nuclear Medicine Department.

### **Cullman**

Once you enter the main entrance of CRMC, you will go straight until you come to the elevators; take the hall to the left of the elevators. Continue down the hall until you see a sign hanging from the ceiling that says DIAGNOSTIC IMAGING. The door to the right is the waiting room. Go through the waiting room to the desk and the students will ask for someone in Nuclear Medicine department. One of the members of our staff will meet them at the receptionist desk. The doors to Nuclear medicine are locked and you must have an access card to enter.

### **HH Decatur Morgan**

Coming into the admission center door on Somerville Road, go down the hallway (green tile line on floor) right and immediate right into the Nuclear Medicine Department.

### **Heart South**

Enter into the 1022 Tower building, walking straight ahead and take elevators (either on the left or right) up to the 5th floor of the building. Once on the 5th floor, enter into suite 500. Approach front desk; identify yourself as nuclear student and front office staff will notify someone in the nuclear department of student's arrival.

## **ATTENDANCE POLICY**

1. Students are expected to be present in clinic for 8 hours, plus 30 minutes for lunch and two-15 minute breaks if the work schedule permits.
2. Punctual attendance is mandatory.

3. If absence or lateness is unavoidable, both the clinical site and the NMT office (975-4237) must be notified within 30 minutes of the scheduled starting time each day that the student is late or absent.
  4. Excessive tardiness or absences may affect the clinical grade adversely.
  5. No absences from clinic are allowed.
  6. Absences must be made up before the end of the last official final exam day of the semester in which they occurred.
- 
7. If class cancellation occurs due to inclement weather on an assigned clinical day, every effort should be made to be present since it is possible the clinics could be in need of assistance on such days. Your safety, however, should take priority. If you cannot get to your clinical site, notify your clinical instructor and the NMT office.

## DRESS CODE

1. All students must wear a long sleeved, knee length lab coat over appropriate street clothes or uniform. No jeans, short skirts, revealing clothing, caps or headwear of any kind are permitted. Headdresses may be worn for religious reasons if approved by faculty, staff and clinical affiliate.
2. The only uniform permitted is defined scrubs with a white or black undershirt. The color of the scrubs will be voted on and determined by each class.
3. Whole body and finger personal dosimetry badges must be properly worn whenever in clinic particularly due to handling radioactive material as required by federal, state and institutional regulations.
4. Student name badges must be worn at all times.
5. Footwear should be clean, cover the entire foot, closed-toed and provide good balance. No high heels, clogs, open-toed shoes are permitted. Properly and securely laced black or white athletic shoes in good condition may be worn.
6. Jewelry, make-up, cologne, and perfume should be understated and kept to a minimum. Fingernails should be clean and neatly trimmed. While piercings other than one set of earrings are discouraged, all students must abide by the clinical affiliates' rules and regulations concerning this issue.
7. Hair should be neat in appearance. Longer hair must be worn up and secured off the face. Excessive or unconventional hairstyles or colors are prohibited. Facial hair must be trimmed and neatly kept. If facial hair interferes with a respiratory fit test, it may need to be shaved.
8. No visible tattoos are allowed.
9. Students may be required to comply with the dress code of a particular institution. See Appendix C, D & E, Institutional Dress Codes (UAB Highlands, UAB Hospital, and CVA).

# RADIATION DOSIMETERS

1. NMT students are issued a whole body badge and TLD ring badge to monitor radiation exposure.
2. Students are responsible for the security of their radiation dosimeters, and are expected to wear them appropriately in the clinical and laboratory settings at all times.
3. Whole body and ring badges will be collected during the last week of each month. Students must review and initial their radiation exposure reports as they become available.
4. Lost badges should be reported to the Clinical Coordinator immediately. Students are not permitted to participate in instructional or clinical activities involving radioactivity without appropriate radiation dosimeters. There is a replacement charge of \$5.00 for ring badges and \$5.00 for whole body badges, payable at the time the new badge(s) is (are) received. A lost film badge report form must also be completed as required by the UAB Radiation Safety Office.

# ACCIDENTS AT CLINICAL SITES

Students who are involved in accidents while in clinic should report the incident to the clinical supervisor immediately. Initial treatment for the injury may be rendered by the clinical site. A charge may be made to the student or the student's insurance for all or part of that treatment. If more extensive treatment is required, depending on the nature of the injury, the student should report to the Student Health Service or the UAB Hospital Emergency Department. If the injury involves a needle stick or exposure to infectious disease, see policy by this link:

<https://www.uab.edu/humanresources/home/employeehealth/reportingexposures>

An incident report should be completed at the site where the accident occurred and copies should be forwarded to the Student Health Service and the NMT Program Director.

The NMT Program Director or Clinical Coordinator should be informed promptly after the accident has occurred.

# EXPOSURE TO INFECTIOUS DISEASE

Students who have received a needle stick injury or who may have been exposed to an infectious disease (e.g., HIV, hepatitis B, tuberculosis) should report the incident to the clinical supervisor immediately.

If the student is in clinic at UAB:

Contact UAB Employee Health (934-3675) during regular daytime working hours or page the Rapid Response Needle stick Team (934-3411) after hours. The student will be instructed where to report for evaluation and treatment.

If the student is in clinic in Birmingham, but outside UAB:

If the institution will not provide care free of charge to the student, contact UAB Student Health (934-3580) or UAB Employee Health (934-3675) for advice about where to report for evaluation and treatment.

If the student is in clinic outside of Birmingham:

Contact UAB Student Health (934-3580) during regular business hours or, if after hours, page the Rapid Response Needlestick Team (934-3411) for advice about where to be evaluated. If travel to Birmingham is not practical, the student will be advised to seek care at the local emergency department if the clinical facility will not provide evaluation through its own employee health service.

An incident report should be completed at the site where the exposure occurred and should include the following details:

- a) the type of exposure
- b) the hepatitis or HIV status of the patient

(If the patient's serological status is unknown, the clinical supervisor should contact the patient's attending physician and request the physician obtain a specimen for serologic testing.)

The student should submit a copy of the incident report and/or copy of the treatment received at the emergency department within a week of the injury/exposure. This documentation should be mailed or hand delivered. Faxes will not be accepted to comply with guidelines governing patient confidentiality.

The NMT Program Director or Clinical Coordinator should be informed promptly after the needle stick/exposure has occurred.

## CELLULAR PHONE AND ELECTRONIC DEVICES POLICY

While in clinic, a student is permitted to have a cell phone; however, the use of a cell phone is only permitted during breaks and lunch periods. Photos, videos and audio recordings in clinic are prohibited unless being used specifically for case study reports and compliance with Protected Health Information (PHI) is applied.

If an emergency situation occurs where the student must be in contact with family or friends, cell phones may be left on in silent or vibrate mode only and any emergency calls must be taken away from patient areas. If this emergency situation occurs in clinic, then the student must notify the Clinical Supervisor of such situation beforehand.

Any other personal electronic devices must only be used during breaks and lunch periods.

## NUCLEAR MEDICAL TECHNOLOGY POLICY ON ELECTRONIC DEVICES

No electronic devices of any kind (i.e. computers, tablets, e-readers, smart phones, video recording devices, sound recording devices, e-smart watches, e-smart glasses, or any other future developed electronic device) is permitted without instructor's approval during scheduled class periods. Violation of this policy will result in the student being asked to leave class and being charged with an unexcused

absence for the class period. (Therefore since the Clinical & Diagnostic Sciences Department has an attendance policy this will be counted as a 1% deduction from your course grade).

## PREGNANCY POLICY

The University of Alabama at Birmingham seeks to treat all students equally, regardless of their actual or potential parental, family or marital status. Title IX of the Education Amendments of 1972 prohibits discrimination on the basis of sex — including pregnancy, parenting and all related conditions — in education and in programs and activities that receive federal funding.

The University must treat pregnant students in the same way it treats similarly situated students. Thus, any accommodation provided to students who have temporary medical conditions will also be provided to pregnant students. Students seeking an accommodation due to pregnancy or a condition related to pregnancy must register with the Title IX Office.

The Title IX Office offers accommodations, options and resources to students who are pregnant, recovering from pregnancy, and/or a condition related to pregnancy. Additionally, the Title IX Office works with students, University administration, departments, faculty, staff, campus police, and other support services to ensure that University policies and programs foster a campus community free of sex discrimination.

To seek accommodations, please contact the Title IX Office by calling 205-996-1340 or emailing [titleixoffice@uab.edu](mailto:titleixoffice@uab.edu). See the <https://www.uab.edu/titleix/> for more information.

The purpose of the student pregnancy policy is to assure students a safe pregnancy and to be in compliance with federal and state radiation control regulations as well as the Equal Employment Opportunity Commission guidelines. Pregnant student nuclear medicine technologists may continue in the Nuclear Medicine Technology program. It is the individual student's responsibility to utilize the guidelines set forth in this policy for protection of the embryo/fetus and self. (see Pregnancy Acknowledgement)

### **Procedure:**

1. Any suspected or known pregnancy can be voluntarily reported to the Program Director and/or the Academic Clinical Coordinator in writing. The program faculty will discuss with the pregnant nuclear medicine technology student the effects of irradiation in utero inclusive of radioprotective procedures.
2. The pregnant student will sign the Pregnancy Release form to acknowledge comprehension of the information provided by the Program faculty. The student will also be referred to the ASRT guidelines and other pertinent references on the subject.
3. The pregnant student will be issued an additional fetal monitor (radiation dosimeter) which will be worn at the waist and **under** a protective apron.

4. According to the NCRP Report # 53, the maximum permissible dose equivalent from occupation exposure to the expectant mother is 500 mrem (5 mSv) for the entire pregnancy.
5. The monthly radiation exposure report inclusive of accumulative dose for each individual is made available to the Program faculty and the student.
6. In accordance with the pregnancy policy of the specific clinical assignment, a student will wear an appropriate lead apron while in clinic.
7. It is not recommended that a pregnant student perform or observe any radiation therapy technique or PET procedure for the duration of the pregnancy.
8. Clinical rotation schedules may be modified to schedule the pregnant student through low radiation areas especially during the first trimester.
9. The pregnant student is expected to meet all objectives and clinical competencies of each clinical education course without exception. Failure to complete all required clinical assignments could possibly result in a failing grade for that clinical course.
10. For further information on this matter, visit the NRC website at [www.nrc.gov/](http://www.nrc.gov/) then proceed by using the following prompts:
  - NRC Library
  - basic reference
  - key guidance documents
  - regulatory guides
  - occupation health
  - guide 8.13
11. A student is offered two alternatives after the consultation with the Program Director upon voluntarily declaring pregnancy. These options are:
  - a. The declared pregnant student can immediately withdraw from all clinical and didactic courses and write a letter to the Radiography Program Director requesting re-entry the following year.
  - b. The declared pregnant student can continue in the program after being given specific instruction regarding radiation safety practices, additional radiation monitoring, and specific clinical and laboratory assignments.
12. The student must abide by the regulations set forth by UAB Radiation Safety concerning Occupationally Exposed Pregnant Personnel and complete any advised training or informational programs requested by UAB Radiation Safety.
13. See NMT Program Policy and Procedure manual for more information.

# CLINICAL ELECTRONIC TRACKING SYSTEM POLICY

Students must participate in the UAB NMT Program Clinical Electronic Tracking System. Failure to do so will result in at least a letter grade deduction from clinical courses and could lead to dismissal from the program.

## PROFESSIONAL BEHAVIOR IN CLINIC POLICY

Students are expected to be professional in clinic. They are to exhibit professional behavior with clinical preceptors, patients, and other healthcare providers. Professional behavior includes not using electronic devices unless given permission, not sleeping in clinic and any other behavior deemed unprofessional by the NMT program director or clinical coordinator.

## FAILURE TO FOLLOW POLICIES AND PROCEDURES OF THE CLINICAL HANDBOOK

Students are required to follow the policies and procedures outlined in the Clinical Education Handbook. The Handbook is distributed at the beginning of the third term, the term in which the clinical experience begins. **Ignorance of the contents of the Clinical Handbook is not an excuse for noncompliance.**

Violations of the policies and procedures will be handled in the following manner:

### **First violation:**

The program director or clinical coordinator will review the policy or procedure in question with the student to ensure that the student understands the expected behavior. The counseling session will be documented in writing and maintained in the student's file.

### **Second violation:**

The student will receive written notification that he/she is being placed on probation for failing to adhere to a policy or procedure for the second time. The period of probation will extend for the remainder of the term in which the second violation took place and the following term.

### **Third violation:**

The third infraction will result in the student's dismissal from the program.

## SCHEDULED CLINICAL SITE VISIT POLICY

Students are to remain at the clinical site until the scheduled visit has been changed or is complete. A scheduled site visit will be conducted by one of the University of Alabama at Birmingham Nuclear Medicine Program personnel. No student is to leave the clinic site prior to the clinical site visit unless an



emergency occurs. In the event of an excusable emergency, proper documentation should be submitted.

## **NUCLEAR MEDICINE TECHNOLOGY POLICY ON ELECTRONIC DEVICES**

No electronic devices of any kind (i.e. computers, tablets, e-readers, smart phones, video recording devices, sound recording devices, e-smart watches, e-smart glasses, or any other future developed electronic device) is permitted without instructor's approval during scheduled class periods. Violation of this policy will result in the student being asked to leave class and being charged with an unexcused absence for the class period. (Therefore since the Clinical & Diagnostic Sciences Department has an attendance policy this will be counted as a 1% deduction from your course grade).

## **STUDENT EVALUATION OF CLINICAL EXPERIENCE**

Students' perceptions about the effectiveness of clinical teaching are very helpful in improving and strengthening the clinical portion of the NMT curriculum. To gather this information in a systematic way, students are asked to evaluate the clinical instruction they have received at the conclusion of each rotation. The completed evaluation form (see Appendix E) should be returned to the Clinical Coordinator within three days of the end of a rotation.

## **CLINICAL DOCUMENTS POLICY**

All paper documents pertaining to clinical work, i.e. competencies, checklists, etc. must be signed off by the clinical preceptor in the presence of the students.

It is the student's responsibility that all forms are signed by the respective person.

It is also the student's responsibility that all forms turned in at the end of term are correct. Any forms deemed incorrect or forged can result in the student being dismissed from the program.

In addition, as we get the new E- Value electronic system initialized and up and running. Verification of students' work will be cross-checked in the electronic system by the clinical coordinator and if any forms are found to be inaccurate or misleading as to what the student has completed in clinic, this can lead to being dismissed from the program at the maximum penalty and a letter grade deduction as a minimum penalty.

# CLINICAL EDUCATION

## OVERVIEW OF CLINICAL EDUCATION

The purpose of clinical education is to provide students with experiences that cannot easily be reproduced in a classroom or instructional laboratory setting. Each student in the Nuclear Medicine Technology Program will be placed in the following areas:

**General Imaging**

**Nuclear Cardiology**

**Radiopharmacy**

**PET Imaging**

**Elective - pediatric nuclear medicine**

While an attempt is made to standardize the clinical experience, each student's experience will be slightly different based on the student's initiative and prior clinical experience and the clinic site's patient population and workload.

To assure that students receive comparable clinical experiences, the clinical education system is composed of five areas that include both written assignments and hands-on skills learning. The five areas are summarized on the next page, Clinical Evaluation System. The written assignments are designed to help students apply their didactic knowledge to clinical practice, and to assist them in evaluating individual strengths and weaknesses as they progress through the clinical practicums. Attaining certain clinical skills is the major focus of the clinical practicum. Hence, the clinical competencies comprise 50% to 80% of the clinical grade, with the greater emphasis on these skills in the last two semesters of the curriculum.

At the end of each term, the student meets with the Clinical Coordinator or Program Director to review the student's self-assessment and to identify the clinical competencies to be completed in the following term.

While in clinic, the student shall be supervised by clinical faculty that are certified nuclear medicine technologists with at least two years' experience.

## CLINICAL EVALUATION SYSTEM

	Second Semester	Third Semester	Fourth Semester						
Clinical Assignments	20% 1. General Orientation 2. Camera Quality Control 3. NRC Regulation Compliance	None  (unless unable to complete during the 3 <sup>rd</sup> Semester)	None  (unless unable to complete during the 3 <sup>rd</sup> Semester)						
*Clinical Competencies	40% Camera quality control Dose calibrator quality control Radiation safety/protection Areas surveys/wipe testing IV injections (if permitted) Bone imaging Other general imaging competencies as assigned	Third semester: 60% Fourth semester: 60%  <table style="width: 100%; border: none;"> <tr> <td style="width: 33%; border: none;"><u>Nuclear Cardiology</u></td> <td style="width: 33%; border: none;"><u>General Imaging</u></td> <td style="width: 33%; border: none;"><u>Reevaluation</u></td> </tr> <tr> <td style="border: none;">Stress test</td> <td style="border: none;">As assigned</td> <td style="border: none;">Beginning in the third semester, each student will be re-evaluated on 2-3 competencies from previous terms. The areas to be reevaluated will be selected by the clinical coordinator or program director.</td> </tr> </table> <p>*In addition to the imaging rotations, each student will complete at least 1 week rotation in Radiopharmacy and a 4-6 week rotation in PET imaging. Students may also complete a 2-3 week elective in pediatric nuclear medicine.</p>		<u>Nuclear Cardiology</u>	<u>General Imaging</u>	<u>Reevaluation</u>	Stress test	As assigned	Beginning in the third semester, each student will be re-evaluated on 2-3 competencies from previous terms. The areas to be reevaluated will be selected by the clinical coordinator or program director.
<u>Nuclear Cardiology</u>	<u>General Imaging</u>	<u>Reevaluation</u>							
Stress test	As assigned	Beginning in the third semester, each student will be re-evaluated on 2-3 competencies from previous terms. The areas to be reevaluated will be selected by the clinical coordinator or program director.							
Summary Evaluation	15%	15%	15%						
Case Studies	10%	Presentation required: 10%	Presentation required: 10%						
Electronic	10%	10%	10%						

Tracking System			
Self-Assessment	5%	5%	5%
TOTAL	100%	100%	100%

***\*Please note that clinical competencies may vary for each semester depending on the clinical rotation site the student is assigned to.***

# COMPUTED TOMOGRAPHY CLINICAL COURSE

## EVALUATION

Four Clinical Education Behavior Evaluation Forms (CEBEs), and one summary evaluation, have to be completed by the CT clinical preceptor, or their designee, during the semester. In addition, each student must complete a self-assessment, summary evaluation, and perform (10) mandatory CT procedures for clinical experience documented on the CT Clinical Competency Evaluation Form. The (10) mandatory CT procedures for clinical experience are as follows:

Head and Neck	2
Spine	2
Thorax	1
Abdomen and Pelvis	2
Musculoskeletal	1
Special Imaging Procedure	1
Quality Control	1

Criteria for grading are based on the following:

Activity	% of Grade
Required Clinical Experience (10)	50%
Electronic Tracking System Use	10%
CEBE (4)	20%
Summary Evaluation (1)	15%
Self-Assessment	5%
<b>Total</b>	<b>100%</b>

# MAGNETIC RESONANCE CLINICAL COURSE

## EVALUATION

Four Level of Performance Forms (LOPs), and one summary evaluation, have to be completed by the MRI clinical preceptor, or their designee, during the semester. In addition, each student must complete a self-assessment, summary evaluation, and perform (10) mandatory MRI procedures for clinical experience documented on the MRI Clinical Competency Evaluation Form. The (10) mandatory MRI procedures for clinical experience are as follows:

Head and Neck	2
Spine	2
Thorax	1
Abdomen and Pelvis	2
Musculoskeletal	1
Special Imaging Procedure	1
Quality Control	1

Criteria for grading are based on the following:

Activity	% of Grade
Required Clinical Experience (10)	50%
Electronic Tracking System Use	10%
CEBE (4)	20%
Summary Evaluation (1)	15%
Self-Assessment	5%
<b>Total</b>	<b>100%</b>

## SITES FOR COMPLETION OF CLINICAL COMPETENCIES

	BMC	CMC	CBMC	DMH	TRINITY	BMCP	PMCC	CULL	UABH	STVE	SBMC	UAB	MW	VA	WBMC
Camera qc	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Dose calibrator qc	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Area survey	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Bone	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Hepatobiliary	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Lung perf	Y	N	Y	Y	Y	Y	Y?	Y	Y	Y	Y	Y	Y	Y?	Y
Lung vent	Y	N	Y	Y	Y	Y	Y?	Y	Y	Y	Y	Y	Y	Y?	Y
Renal	Y	N	N	Y	Y	Y	Y?	Y?	Y	Y	Y	Y	Y	Y	Y
Renal process	Y	N	N	Y	Y	Y	Y?	Y?	Y	Y	Y	Y	Y	Y	Y
Thyroid	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Thy uptake	Y	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Muga/ERNA	Y	N	N	Y	Y	Y	Y?	Y?	Y?	Y?	Y?	Y	Y?	Y?	Y
Muga/ERNA process	Y	N	N	Y	Y	Y	Y?	Y?	Y?	Y?	Y?	Y	Y?	Y?	Y
IV inj	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y
Stress test	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y

Myocardial perf imaging	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y
Myocardial process	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y
IV Placement		Y?	Y?	Y?	N	N	N	Y	N	N	N	N	N	N	N

Y = Yes ?= Maybe

N = No

## SITES FOR COMPLETION OF CLINICAL COMPETENCIES (NUCLEAR CARDIOLOGY)

	CPC	BCDC	BMC CARDIO	HS
Camera				
qc	Y	Y	Y	Y
Dose calibration				



qc	Y	Y	Y	Y
Area survey	Y	Y	Y	Y
Muga/ERNA	Y?	Y?	Y?	Y
Muga/ERNA process	Y?	Y?	Y?	Y
IV injection	Y	N	Y	Y
Stress test	Y	Y	Y	Y
Myocardial perf imaging	Y	Y	Y	Y
Myocardial process	Y	Y	Y	Y
IV Placement	Y	N	Y	Y
Attenuation Correction	Y	N	Possible	N

Y = Yes ?=Maybe

N = No

# NUCLEAR MEDICINE TECHNOLOGY PROGRAM

## CLINICAL OBJECTIVES:

Upon completion of the clinical portion of the NMT curriculum (NMT 491-493), the student will be able to perform the following tasks in the clinical setting.

## DEPARTMENT ADMINISTRATION/MANAGEMENT FUNCTIONS

1. State the code numbers and the emergency dialing procedures for cardiac arrest, fire, and security.
2. State the location of the emergency equipment for use in the nuclear medicine department.
3. Describe the daily department routine in relation to patient scheduling, radiation surveys, radiopharmaceutical ordering, and general supplies ordering.
4. Interact with hospital and departmental staff to schedule examinations most effectively.

## RADIATION SAFETY/PROTECTION

1. Use time, distance and shielding techniques consistently to minimize radiation exposure to self and others.
2. Wear protective clothing and personnel monitoring devices consistently.
3. Use appropriate methods for storing and disposing of radioactive materials and waste.
4. Perform area radiation surveys and wipe tests for contamination on a regular schedule.
5. Perform decontamination procedures as required.
6. Review own monthly radiation exposure and take appropriate action to decrease exposure, as needed.
7. Receive and process radioactive shipments according to department protocol and regulatory

requirements.

8. Maintain records of radiation surveys, wipe tests, waste disposal, radioactive material receipt, and radioactive spills and decontamination according to regulatory requirements.

## PATIENT CARE

1. Maintain the patient's dignity and comfort.
2. Communicate with the patient throughout the procedure to provide reassurance and elicit cooperation.
3. Consistently use standard precautions and appropriate isolation techniques, as necessary.
4. Use proper body mechanics and techniques for transferring patients to and from imaging beds.
5. Operate oxygen delivery equipment, as needed.
6. Observe and maintain intravenous tubing, nasogastric tubing, chest tubes, urinary catheters, CVP lines, and oxygen administration lines.
7. Assist patients with bedpans, urinals, and emesis basins.
8. Determine vital signs as needed.
9. Recognize emergency medical situations and notify appropriate personnel.
10. Initiate CPR, if necessary.
11. Provide appropriate first aid in response to patient seizures, hemorrhage, or fainting.

## IMAGING AND NON-IMAGING PROCEDURES

1. Verify the identity of all patients and confirm the written orders for a procedure before proceeding with an examination.
2. Explain the procedure to the patient in a clear, honest and reassuring manner, and address any questions or concerns the patient may have.

3. Obtain pertinent medical history by reviewing the medical record or interviewing the patient.
4. Identify contraindications for the nuclear medicine study and confirm that necessary pre-examination procedures have been completed.
5. Administer the appropriate radiopharmaceutical by the proper route.
6. Prepare the necessary equipment for the procedure.
7. Enter appropriate patient data into the computer and select the correct computer acquisition software.
8. Position the patient correctly and comfortably, and position the equipment to encompass the area to be studied.
9. Initiate imaging/data collections at the appropriate time(s) following tracer administration.
10. Perform venipuncture as required to collect venous blood samples.
11. Process examination data using the appropriate computer protocol.
12. Place all examination results in the proper format and label them accurately and completely.
13. Review the examination results for completeness and technical quality.
14. Perform the following routine examinations independently using the appropriate protocol and instrumentation:
  - bone imaging
  - gated equilibrium left ventricular function
  - hepatobiliary imaging
  - lung perfusion imaging
  - lung ventilation imaging
  - myocardial stress/rest imaging
  - renal function imaging
  - thyroid imaging
  - thyroid uptake

# INSTRUMENTATION

1. Perform routine scintillation camera quality control (uniformity, linearity, resolution and center of rotation) using standardized parameters.
2. Review scintillation camera quality control results and compare with previous results to determine acceptability and need for service.
3. Perform dose calibrator quality control (constancy, linearity, accuracy, geometric variation,) at prescribed intervals using the appropriate radiation sources.
4. Review dose calibrator quality control results and compare with previous results to determine acceptable performance.
5. Calibrate a scintillation spectrometer.
6. Perform daily background checks, chi-square evaluations and energy resolution checks on a scintillation spectrometer.
7. Review scintillation spectrometer quality control and compare with previous results to determine acceptable performance.
8. Operate a survey meter, checking the batteries and check source before each use.
9. Maintain records of instrumentation quality control results according to regulatory requirements.

# RADIOPHARMACY

1. Correctly elute a Mo-99/Tc-99m generator using aseptic and radiation protection techniques.
2. Assay the eluate and determine its concentration.
3. Perform Mo-99 and Al<sup>3+</sup> breakthrough checks on Tc-99m eluate, determine if the eluate is acceptable for administration and record the results.
4. Prepare Tc-99m-labeled radiopharmaceuticals according to kit instructions.
5. Calculate the final concentration of the preparation.

6. Determine the radiochemical purity of each prepared Tc-99m radiopharmaceutical, analyze and record the results.
7. Using a calculator and decay factor chart, calculate the volume or number of capsules in a unit dose.
8. Dispense a unit dose using appropriate radiation safety and aseptic techniques, and label the syringe or syringe shield.
9. Verify each unit dose in a dose calibrator before administration.
10. Record unit dose information in the appropriate format.
11. Dispose of radioactive and bio-hazardous waste appropriately.
12. Maintain records of eluate and radiopharmaceutical quality control, and unit dose records according to regulatory requirements.

## PROFESSIONAL BEHAVIOR

1. Assess his/her own work objectively and implement changes for improvement.
2. Exercise independent judgment while remaining within limits of responsibility.
3. Interact with patients in a professional and empathetic manner.
4. Maintain confidentiality of patient information.
5. Cooperate effectively with other staff members.
6. Exercise proper judgment in using electronic devices when given permission to use them by the clinic site.
7. Refrain from sleeping while in class or clinic.

# CLINICAL ASSIGNMENTS

**NMT 691 CLINICAL PRACTICE I**

# Clinical Assignment #1: ORIENTATION

Name: \_\_\_\_\_ Clinical Site: \_\_\_\_\_

Date: \_\_\_\_\_

1. Who is the clinical supervisor/chief technologist in this department?
2. How many other nuclear medicine technologists work in this department?
3. Identify the physicians who interpret the nuclear medicine studies.
4. If there are other personnel who participate in the performance of patient studies, who are they (e.g., nurse, paramedic) and what are their responsibilities?



5. Who do you call to report an emergency and what is/are the emergency phone numbers?  
Consider the different types of emergencies: cardiac arrest, fire, security, etc.

***Clinical Assignment #1: Orientation Continued...***

6. Where is the emergency equipment kept? What equipment does this include?

7. How are the following supplies obtained? From whom are they ordered; who places the order; when is the order placed?

Linen

Non-radioactive drugs  
(e.g. persantine)

Radiopharmaceuticals

8. Where is the nuclear medicine procedure manual kept? What is the purpose of this document? When was it last updated? What information is contained in this manual?

9. How is nuclear medicine staff made aware of a referring physician's order?

***Clinical Assignment #1: Orientation Continued...***

10. What is this department's procedure for verifying the physician's order for a nuclear medicine study?

11. Who is responsible for transporting patients to nuclear medicine? How is this arranged for?

## Clinical Assignment #2: CAMERA QUALITY CONTROL

Name: \_\_\_\_\_ Clinical Site: \_\_\_\_\_

Date: \_\_\_\_\_

1. How many scintillation cameras does this department have?

**Choose one camera and answer the following questions about it.**

2. State the manufacturer's name and model of the camera you have chosen.

3. How large is the crystal in this camera? Crystal size is typically reported as the diameter of the crystal in mm.

4. How many photomultiplier tubes (PMTs) are in this camera?





9. What type of phantom is used to monitor the camera's resolution and linearity? What is the smallest bar width or hole in the phantom? How does it compare to the camera's intrinsic resolution?

***Clinical Assignment #2: Camera Quality Control Continued...***

10. Review today's uniformity and this week's resolution/linearity quality control images performed on this camera. Describe the results. How do the most recent images compare with previous images?

11. Based on the most recent quality control images, can this camera be used for patient imaging?

12. How are the results of these quality control results recorded and stored?



NMT 691 CLINICAL PRACTICE I

# Clinical Assignment #3: ASSESSMENT OF COMPLIANCE WITH NRC REGULATIONS

Name: \_\_\_\_\_ Date: \_\_\_\_\_

## COMPLIANCE EVALUATION STUDENT CHECK LIST

### Specific Licenses

Human use by institutions:

Appointed Radiation Safety Officer? \_\_\_ Name: \_\_\_\_\_ Qualifications: \_\_\_\_\_

Medical Radiation Safety Committee instituted? \_\_\_ If no, reasons: \_\_\_\_\_

\_\_\_\_\_

If yes, committee members:

\_\_\_\_\_

\_\_\_\_\_

Users are physicians trained in isotopes? \_\_\_ Isotopes authorized \_\_\_\_\_

Purpose of use (10 CFR 35.100, 200, etc. with description): \_\_\_\_\_

\_\_\_\_\_

Clinical facilities for patient care?

\_\_\_\_\_

\_\_\_\_\_

### Registration of Sources

Sealed source inventory on file? \_\_\_\_\_

### Security

Sources locked up when not in use? \_\_\_\_\_

### Uncontrolled Area Levels

***Clinical Assignment #3: Assessment of Compliance with NRC Regulations Continued...***

At all points, dose rate less than 2 mrem/hr. or 100 mrem/week or 0.5 rem/year? \_\_\_\_

\_\_\_\_\_

Surveys & Tests

Periodic area surveys? \_\_\_\_\_ How often? \_\_\_\_\_

Periodic contamination surveys? \_\_\_\_\_ How often? \_\_\_\_\_

Semi-annual leak test of sealed sources? \_\_\_\_\_

Instrument calibration

Periodic instrument calibrations? \_\_\_\_\_ Briefly explain each type with frequency:

Gamma Camera \_\_\_\_\_

Uptake Probe \_\_\_\_\_

Well Counter \_\_\_\_\_

Dose Calibrator \_\_\_\_\_

Survey meter \_\_\_\_\_

Software (e.g.: flood correction tables) \_\_\_\_\_

Any other \_\_\_\_\_

Waste Disposal

Disposal by sewer? \_\_\_\_\_ Burial? \_\_\_\_\_

Transfer? \_\_\_\_\_ To whom? \_\_\_\_\_

Package Receipt

Radioisotope orders placed by RSO/ designee? \_\_\_\_\_

Packages monitored upon receipt? \_\_\_\_\_

Personnel Dosimeters

Available to persons likely to be exposed? \_\_\_\_\_ How many? \_\_\_\_\_

Radiations measured: \_\_\_\_\_

Available at all high radiation areas? \_\_\_\_\_

Signs and Labels

Radioactive materials areas posted? \_\_\_\_\_

Radiation areas posted? \_\_\_\_\_

High radiation areas posted? \_\_\_\_\_

Instruction of Personnel

Regulations, licenses and operating procedures available? \_\_\_\_\_

“Notice to Employees” posted in work areas? \_\_\_\_\_

Personnel exposure records available? \_\_\_\_\_

Emergency procedures posted? \_\_\_\_\_

Adequate training in safety procedures? \_\_\_\_\_

Records

***Clinical Assignment #3: Assessment of Compliance with NRC Regulations Continued***

Calibrations? \_\_\_\_\_ Surveys? \_\_\_\_\_

Receipt, transfer & disposal of sources? \_\_\_\_\_

Personnel exposures? \_\_\_\_\_ Contamination surveys? \_\_\_\_\_

Wipe tests? \_\_\_\_\_ Employee training? \_\_\_\_\_

Results of student performed tests

Wipe test for contamination:

Locations of wipes \_\_\_\_\_

Activities found \_\_\_\_\_

Area surveys:

Locations of surveys \_\_\_\_\_

Measures Dose Equivalent Rates \_\_\_\_\_

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(Signature)

---

(Date)

**NMT COMPETENCIES:**

**RADIATION SAFETY  
&  
QUALITY CONTROL**

## Competency Evaluation

### CAMERA QUALITY CONTROL

STUDENT: \_\_\_\_\_

DATE: \_\_\_\_\_

Before this evaluation is attempted, the student must have completed independently camera quality control at least **5** times under the supervision of a technologist. The technologist evaluating the student should circle the performance level for each item.

1. Remove existing collimator	Met	Not met	Not applicable
2. Raise detector to correct height	Met	Not met	Not applicable
3. Place point source at correct distance	Met	Not met	Not applicable
4. Place sheet source at correct distance	Met	Not met	Not applicable
5. Place bar phantom in correct position	Met	Not met	Not applicable
6. Prepare camera &/or computer to begin acquisition (correct energy setting, window setting, acquisition parameters)	Met	Not met	Not applicable
7. Label images with appropriate information	Met	Not met	Not applicable
8. Present images to supervisor	Met	Not met	Not applicable
9. Return camera to operational status	Met	Not met	Not applicable
10. Perform qc tests efficiently	Met	Not met	Not applicable
11. Observe radiation safety procedures	Met	Not met	Not applicable

Comments:

After observing the student complete uniformity, resolution, and linearity tests on the gamma camera, I believe that he/she is competent to perform these procedures with minimal assistance.

Technologist: \_\_\_\_\_ Date: \_\_\_\_\_

## Competency Evaluation

### DOSE CALIBRATOR CONSTANCY CHECK

STUDENT: \_\_\_\_\_

DATE: \_\_\_\_\_

Before this evaluation is attempted, the student must have completed independently daily dose calibrator quality control at least **3** times under the supervision of a technologist. The technologist evaluating the student should circle the performance level for each item.

- |  |     |         |                |
|--|-----|---------|----------------|
| 1. Choose correct reference for constancy test   | Met | Not met | Not applicable |
| 2. Measure standard at appropriate radionuclide settings                                     | Met | Not met | Not applicable |
| 3. Obtain background at each radionuclide Setting  | Met | Not met | Not applicable |
| 4. Subtract background from measurement at each radionuclide setting                         | Met | Not met | Not applicable |
| 5. Correct each measurement for decay  | Met | Not met | Not applicable |
| 6. Calculate percent difference between calculated and measured readings.                    | Met | Not met | Not applicable |
| 7. Record and review results; determine if calibrator is operating within acceptable limits. | Met | Not met | Not applicable |

Comments:



After observing the student complete constancy testing on the dose calibrator, I believe that he/she is competent to perform this procedure with minimal assistance.

Technologist: \_\_\_\_\_

Date: \_\_\_\_\_

## Competency Evaluation

### RADIATION SAFETY/PROTECTION PRACTICES

STUDENT: \_\_\_\_\_

DATE: \_\_\_\_\_

The technologist evaluating the student should circle the performance level for each item.

- |  |     |         |                |
|--|-----|---------|----------------|
| 1. Consistently wears personal radiation dosimeters correctly                                      | Met | Not met | Not applicable |
| 2. Consistently uses appropriate measures to reduce radiation exposure (time, distance, shielding) | Met | Not met | Not applicable |
| 3. Routinely uses syringe shields when preparing or administering doses                            | Met | Not met | Not applicable |
| 4. Routinely monitors hands & feet before leaving clinical area                                    | Met | Not met | Not applicable |
| 5. Disposes of radioactive waste appropriately   | Met | Not met | Not applicable |
| 6. Consistently wears gloves when handling radioactive materials                                   | Met | Not met | Not applicable |
| 7. Promptly cleans radioactive spills and decontaminates area correctly                            | Met | Not met | Not applicable |

Comments:

After observing the student complete this task, I believe that he/she is competently performs these procedures with minimal assistance or reminders.

Technologist: \_\_\_\_\_ Date: \_\_\_\_\_

## Competency Evaluation

### AREA SURVEYS / WIPE TESTING

STUDENT: \_\_\_\_\_

DATE: \_\_\_\_\_

Before this evaluation is attempted, the student must have completed independently at least **3** area surveys and wipe tests under the supervision of a technologist. The technologist evaluating the student should circle the performance level for each item.

1. Check batteries in survey meter before making measurements	Met	Not met	Not applicable
2. Measure background radiation level	Met	Not met	Not applicable
3. Use survey meter properly (adjust scale; aim window at area being measured; move probe slowly over area to obtain accurate measurement)	Met	Not met	Not applicable
4. Monitor areas according to department floor plan	Met	Not met	Not applicable
5. Record measurements in appropriate format	Met	Not met	Not applicable
6. Correctly identify areas needing Decontamination	Met	Not met	Not applicable
7. Perform wipe tests on contaminated areas to determine removable condition	Met	Not met	Not applicable
8. Decontaminate areas, as necessary, to background level	Met	Not met	Not applicable

Comments:

After observing the student, I believe that he/she competently performs these procedures with minimal assistance.

Technologist: \_\_\_\_\_

Date: \_\_\_\_\_

**NMT COMPETENCIES:**

## **GENERAL IMAGING**

## Competency Evaluation

### INTRAVENOUS INJECTION COMPETENCY

**STUDENT:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

Before this evaluation is attempted, the student must have completed independently at least **10** intravenous injections under the supervision of a technologist. The technologist evaluating the student should circle the performance level for each item.

1. * Verify written orders for the study	Met	Not met	Not applicable
2. * Verify patient identification	Met	Not met	Not applicable
3. Use effective communication skills	Met	Not met	Not applicable
4. Assemble injection materials (supplies ready, accessible, organized)	Met	Not met	Not applicable
5. Choose appropriate site (position, assessment)	Met	Not met	Not applicable
6. Place tourniquet correctly (occlude vein 2-3 in. above site)	Met	Not met	Not applicable
7. * Use appropriate aseptic technique (alcohol prep used to swab site in spiral inward to outward motion; re-swab if repeat palpation)	Met	Not met	Not applicable
8. * Wear gloves	Met	Not met	Not applicable
9. Handle syringe proficiently (inspect contents; remove cap smoothly, place in holder if one used; hold dose to minimize radiation exposure)	Met	Not met	Not applicable
10. Access vein proficiently (bevel up; vein anchored; syringe securely held; smooth entry; shallow angle of injection; needle penetrates top wall of vein; sufficient depth; minimize manipulation)	Met	Not met	Not applicable
11. Administer radiopharmaceutical (infuse dose slowly checking for infiltration)	Met	Not met	Not applicable
12. Release tourniquet (release tourniquet without disturbing needle; release tourniquet before removing needle)	Met	Not met	Not applicable
13. Remove needle (cotton held lightly over puncture site until needle removed; needle removed in smooth	Met	Not met	Not applicable

action)

***Intravenous Injection Competency continued...***

14. Care for puncture site (apply pressure to site; apply bandage; check for bleeding)	Met	Not met	Not applicable
15. * Dispose of waste appropriately (needle not recapped or “scoop” technique used to cover needle; bio-hazardous and radioactive waste disposed of in appropriate containers)	Met	Not met	Not applicable
16. * Demonstrate proper radiation protection and universal precautions techniques throughout procedure	Met	Not met	Not applicable

**\* Failure to perform these tasks constitutes an automatic failure of this competency. Student must complete an additional 10 intravenous injections under the supervision of a technologist before attempting the competency evaluation a second time.**

Comments:

After observing the student complete this task, I believe that he/she is competent to perform an intravenous injection independently.

Technologist: \_\_\_\_\_ Date: \_\_\_\_\_

# Competency Evaluation

## BONE: IMAGING

STUDENT: \_\_\_\_\_

DATE: \_\_\_\_\_

Before this evaluation is attempted, the student must have completed independently at least 3 bone-imaging studies under the supervision of a technologist. The technologist evaluating the student should circle the performance level for each item.

### PATIENT CARE:

1. * Verify patient identification and written orders for study	Met	Not met	Not applicable
2. Communicate with patient (including procedure explanation)	Met	Not met	Not applicable
3. Obtain appropriate history	Met	Not met	Not applicable
4. Perform aseptic IV injection	Met	Not met	Not applicable
5. Provide appropriate patient care	Met	Not met	Not applicable
6. Assist in patient transfer	Met	Not met	Not applicable
7. Provide safe and dignified environment	Met	Not met	Not applicable
8. Discharge the patient	Met	Not met	Not applicable

### INSTRUMENTATION:

9. Calibrate camera for radionuclide	Met	Not met	Not applicable
10. Choose and install correct collimator	Met	Not met	Not applicable
11. Set acquisition parameters correctly	Met	Not met	Not applicable
12. Enter patient information	Met	Not met	Not applicable
13. Operate camera efficiently	Met	Not met	Not applicable

### PERFORM BONE IMAGE:

14. Remove attenuating objects	Met	Not met	Not applicable
15. Request that patient void bladder	Met	Not met	Not applicable
16. Position patient correctly	Met	Not met	Not applicable
17. Compensate for positioning problems	Met	Not met	Not applicable
18. Place detector at appropriate distance	Met	Not met	Not applicable
19. Perform image efficiently	Met	Not met	Not applicable

### COMPLETING THE BONE IMAGE:

20. Label images correctly	Met	Not met	Not applicable
21. Present study to supervisor	Met	Not met	Not applicable
22. Prepare room for next patient	Met	Not met	Not applicable



**RADIATION / BIOHAZARDS:**

23. Observe precautions throughout study	Met	Not met	Not applicable
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*Competency Evaluation Bone: Imaging continued...*

**PROBLEM SOLVING:**

24. Recognizing problems & handle each appropriately	Met	Not met	Not applicable
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**\*Failure to perform this task constitutes an automatic failure of this competency.**

Comments:

After observing the student complete this study, I believe that he/she is competent to perform this study with minimal assistance.

Technologist: \_\_\_\_\_ Date: \_\_\_\_\_

# Competency Evaluation

## BONE: SPECT IMAGING

STUDENT: \_\_\_\_\_

DATE: \_\_\_\_\_

Before this evaluation is attempted, the student must have completed independently at least 3 bone-imaging studies under the supervision of a technologist. The technologist evaluating the student should circle the performance level for each item.

### PATIENT CARE:

1. * Verify patient identification and written orders for study	Met	Not met	Not applicable
2. Communicate with patient (including procedure explanation)	Met	Not met	Not applicable
3. Obtain appropriate history	Met	Not met	Not applicable
4. Perform aseptic IV injection	Met	Not met	Not applicable
5. Provide appropriate patient care	Met	Not met	Not applicable
6. Assist in patient transfer	Met	Not met	Not applicable
7. Provide safe and dignified environment	Met	Not met	Not applicable
8. Discharge the patient	Met	Not met	Not applicable

### INSTRUMENTATION:

9. Calibrate camera for radionuclide	Met	Not met	Not applicable
10. Choose and install correct collimator	Met	Not met	Not applicable
11. Set acquisition parameters correctly	Met	Not met	Not applicable
12. Enter patient information	Met	Not met	Not applicable
13. Operate camera efficiently	Met	Not met	Not applicable

### PERFORM BONE SPECT IMAGE:

14. Remove attenuating objects	Met	Not met	Not applicable
15. Request that patient void bladder	Met	Not met	Not applicable
16. Position patient correctly	Met	Not met	Not applicable
17. Compensate for positioning problems	Met	Not met	Not applicable
18. Place detector at surface of patient	Met	Not met	Not applicable
19. Perform SPECT image efficiently	Met	Not met	Not applicable

### COMPLETING THE BONE SPECT IMAGE:

20. Process and label the image correctly	Met	Not met	Not applicable
21. Present study to supervisor	Met	Not met	Not applicable

22. Prepare room for next patient	Met	Not met	Not applicable
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**Competency Evaluation Bone: SPECT Imaging continued...**

**RADIATION / BIOHAZARDS:**

23. Observe precautions throughout study	Met	Not met	Not applicable
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**PROBLEM SOLVING:**

24. Recognizing problems & handle each appropriately	Met	Not met	Not applicable
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**\*Failure to perform this task constitutes an automatic failure of this competency.**

Comments:

After observing the student complete this study, I believe that he/she is competent to perform this study with minimal assistance.

Technologist: \_\_\_\_\_ Date: \_\_\_\_\_

## Competency Evaluation

### BONE: LIMITED BONE IMAGING

**STUDENT:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

Before this evaluation is attempted, the student must have completed independently at least **3** limited bone-imaging studies under the supervision of a technologist. The technologist evaluating the student should circle the performance level for each item.

#### **PATIENT CARE:**

1. * Verify patient identification and written orders for study	Met	Not met	Not applicable
2. Communicate with patient (including procedure explanation)	Met	Not met	Not applicable
3. Obtain appropriate history	Met	Not met	Not applicable
4. Perform aseptic IV injection	Met	Not met	Not applicable
5. Provide appropriate patient care	Met	Not met	Not applicable
6. Assist in patient transfer	Met	Not met	Not applicable
7. Provide safe and dignified environment	Met	Not met	Not applicable
8. Discharge the patient	Met	Not met	Not applicable

#### **INSTRUMENTATION:**

9. Calibrate camera for radionuclide	Met	Not met	Not applicable
10. Choose and install correct collimator	Met	Not met	Not applicable
11. Set acquisition parameters correctly	Met	Not met	Not applicable
12. Enter patient information	Met	Not met	Not applicable
13. Operate camera efficiently	Met	Not met	Not applicable

#### **PERFORM LIMITED BONE IMAGE:**

14. Remove attenuating objects	Met	Not met	Not applicable
15. Request that patient void bladder	Met	Not met	Not applicable
16. Position patient correctly	Met	Not met	Not applicable
17. Compensate for positioning problems	Met	Not met	Not applicable
18. Place detector at surface of patient	Met	Not met	Not applicable
19. Perform image efficiently	Met	Not met	Not applicable

#### **COMPLETING THE LIMITED BONE IMAGE:**

20. Label the image correctly	Met	Not met	Not applicable
21. Present study to supervisor	Met	Not met	Not applicable

22. Prepare room for next patient	Met	Not met	Not applicable
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**Competency Evaluation Bone: Limited Bone Imaging continued...**

**RADIATION / BIOHAZARDS:**

23. Observe precautions throughout study	Met	Not met	Not applicable
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**PROBLEM SOLVING:**

24. Recognizing problems & handle each appropriately	Met	Not met	Not applicable
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**\*Failure to perform this task constitutes an automatic failure of this competency.**

Comments:

After observing the student complete this study, I believe that he/she is competent to perform this study with minimal assistance.

Technologist: \_\_\_\_\_ Date: \_\_\_\_\_

## Competency Evaluation

### BONE: THREE-PHASE BONE IMAGING

STUDENT: \_\_\_\_\_

DATE: \_\_\_\_\_

Before this evaluation is attempted, the student must have completed independently at least 3 three-phase bone-imaging studies under the supervision of a technologist. The technologist evaluating the student should circle the performance level for each item.

#### PATIENT CARE:

1. * Verify patient identification and written orders for study	Met	Not met	Not applicable
2. Communicate with patient (including procedure explanation)	Met	Not met	Not applicable
3. Obtain appropriate history	Met	Not met	Not applicable
4. Perform aseptic IV injection	Met	Not met	Not applicable
5. Provide appropriate patient care	Met	Not met	Not applicable
6. Assist in patient transfer	Met	Not met	Not applicable
7. Provide safe and dignified environment	Met	Not met	Not applicable
8. Discharge the patient	Met	Not met	Not applicable

#### INSTRUMENTATION:

9. Calibrate camera for radionuclide	Met	Not met	Not applicable
10. Choose and install correct collimator	Met	Not met	Not applicable
11. Set acquisition parameters correctly	Met	Not met	Not applicable
12. Enter patient information	Met	Not met	Not applicable
13. Operate camera efficiently	Met	Not met	Not applicable

#### PERFORM 3-PHASE BONE IMAGE:

14. Remove attenuating objects	Met	Not met	Not applicable
15. Request that patient void bladder	Met	Not met	Not applicable
16. Position patient correctly	Met	Not met	Not applicable
17. Compensate for positioning problems	Met	Not met	Not applicable
18. Place detector at surface of patient	Met	Not met	Not applicable
19. Perform image efficiently	Met	Not met	Not applicable

#### COMPLETING THE 3-PHASE BONE IMAGE:

20. Label the image correctly	Met	Not met	Not applicable
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21. Present study to supervisor	Met	Not met	Not applicable
22. Prepare room for next patient	Met	Not met	Not applicable

**RADIATION / BIOHAZARDS:**

23. Observe precautions throughout study	Met	Not met	Not applicable
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**Competency Evaluation Bone: Three-Phase Bone Imaging Continued...**

**PROBLEM SOLVING:**

24. Recognizing problems & handle each appropriately	Met	Not met	Not applicable
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**\*Failure to perform this task constitutes an automatic failure of this competency.**

Comments:

After observing the student complete this study, I believe that he/she is competent to perform this study with minimal assistance.

Technologist: \_\_\_\_\_ Date: \_\_\_\_\_



# Competency Evaluation

## BRAIN: DYNAMIC IMAGING

**STUDENT:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

Before this evaluation is attempted, the student must have completed independently at least **3** dynamic brain-imaging studies under the supervision of a technologist. The technologist evaluating the student should circle the performance level for each item.

### PATIENT CARE:

1. * Verify patient identification and written orders for study	Met	Not met	Not applicable
2. Communicate with patient (including procedure explanation)	Met	Not met	Not applicable
3. Obtain appropriate history	Met	Not met	Not applicable
4. Perform aseptic IV injection	Met	Not met	Not applicable
5. Provide appropriate patient care	Met	Not met	Not applicable
6. Assist in patient transfer	Met	Not met	Not applicable
7. Provide safe and dignified environment	Met	Not met	Not applicable
8. Discharge the patient	Met	Not met	Not applicable

### INSTRUMENTATION:

9. Calibrate camera for radionuclide	Met	Not met	Not applicable
10. Choose and install correct collimator	Met	Not met	Not applicable
11. Set acquisition parameters correctly	Met	Not met	Not applicable
12. Enter patient information	Met	Not met	Not applicable
13. Operate camera efficiently	Met	Not met	Not applicable

### PERFORM DYNAMIC BRAIN IMAGE:

14. Remove attenuating objects	Met	Not met	Not applicable
15. Request that patient void bladder	Met	Not met	Not applicable
16. Position patient correctly	Met	Not met	Not applicable
17. Compensate for positioning problems	Met	Not met	Not applicable
18. Place detector at surface of patient	Met	Not met	Not applicable
19. Perform image efficiently	Met	Not met	Not applicable

### COMPLETING THE DYNAMIC BRAIN IMAGE:

20. Process and label the image correctly	Met	Not met	Not applicable
21. Present study to supervisor	Met	Not met	Not applicable

22. Prepare room for next patient	Met	Not met	Not applicable
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**Competency Evaluation Brain: Dynamic Imaging continued...**

**RADIATION / BIOHAZARDS:**

23. Observe precautions throughout study	Met	Not met	Not applicable
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**PROBLEM SOLVING:**

24. Recognizing problems & handle each appropriately	Met	Not met	Not applicable
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**\*Failure to perform this task constitutes an automatic failure of this competency.**

Comments:

After observing the student complete this study, I believe that he/she is competent to perform this study with minimal assistance.

Technologist: \_\_\_\_\_ Date: \_\_\_\_\_

# Competency Evaluation

## BRAIN: PLANAR IMAGING

STUDENT: \_\_\_\_\_

DATE: \_\_\_\_\_

Before this evaluation is attempted, the student must have completed independently at least **3** planar brain-imaging studies under the supervision of a technologist. The technologist evaluating the student should circle the performance level for each item.

### PATIENT CARE:

1. * Verify patient identification and written orders for study	Met	Not met	Not applicable
2. Communicate with patient (including procedure explanation)	Met	Not met	Not applicable
3. Obtain appropriate history	Met	Not met	Not applicable
4. Perform aseptic IV injection	Met	Not met	Not applicable
5. Provide appropriate patient care	Met	Not met	Not applicable
6. Assist in patient transfer	Met	Not met	Not applicable
7. Provide safe and dignified environment	Met	Not met	Not applicable
8. Discharge the patient	Met	Not met	Not applicable

### INSTRUMENTATION:

9. Calibrate camera for radionuclide	Met	Not met	Not applicable
10. Choose and install correct collimator	Met	Not met	Not applicable
11. Set acquisition parameters correctly	Met	Not met	Not applicable
12. Enter patient information	Met	Not met	Not applicable
13. Operate camera efficiently	Met	Not met	Not applicable

### PERFORM BRAIN IMAGE:

14. Remove attenuating objects	Met	Not met	Not applicable
15. Request that patient void bladder	Met	Not met	Not applicable
16. Position patient correctly	Met	Not met	Not applicable
17. Compensate for positioning problems	Met	Not met	Not applicable
18. Place detector at surface of patient	Met	Not met	Not applicable
19. Perform image efficiently	Met	Not met	Not applicable

### COMPLETING THE BRAIN IMAGE:

20. Label the image correctly	Met	Not met	Not
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applicable

**Competency Evaluation Brain: Planar Imaging continued...**

21. Present study to supervisor	Met	Not met	Not applicable
22. Prepare room for next patient	Met	Not met	Not applicable

**RADIATION / BIOHAZARDS:**

23. Observe precautions throughout study	Met	Not met	Not applicable
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**PROBLEM SOLVING:**

24. Recognizing problems & handle each appropriately	Met	Not met	Not applicable
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**\*Failure to perform this task constitutes an automatic failure of this competency.**

Comments:

After observing the student complete this study, I believe that he/she is competent to perform this study with minimal assistance.

Technologist: \_\_\_\_\_ Date: \_\_\_\_\_

# Competency Evaluation

## GI BLEED

STUDENT: \_\_\_\_\_

DATE: \_\_\_\_\_

Before this evaluation is attempted, the student must have completed independently at least **3** GI Bleed-imaging studies under the supervision of a technologist. The technologist evaluating the student should circle the performance level for each item.

### PATIENT CARE:

1. * Verify patient identification and written orders for study	Met	Not met	Not applicable
2. Communicate with patient (including procedure explanation)	Met	Not met	Not applicable
3. Obtain appropriate history	Met	Not met	Not applicable
4. Draw blood and perform aseptic IV injection	Met	Not met	Not applicable
5. Provide appropriate patient care	Met	Not met	Not applicable
6. Assist in patient transfer	Met	Not met	Not applicable
7. Provide safe and dignified environment	Met	Not met	Not applicable
8. Discharge the patient	Met	Not met	Not applicable

### INSTRUMENTATION:

9. Calibrate camera for radionuclide	Met	Not met	Not applicable
10. Choose and install correct collimator	Met	Not met	Not applicable
11. Set acquisition parameters correctly	Met	Not met	Not applicable
12. Enter patient information	Met	Not met	Not applicable
13. Operate camera efficiently	Met	Not met	Not applicable

### PERFORM GI Bleed IMAGE:

14. Remove attenuating objects	Met	Not met	Not applicable
15. Request that patient void bladder	Met	Not met	Not applicable
16. Position patient correctly	Met	Not met	Not applicable
17. Compensate for positioning problems	Met	Not met	Not applicable
18. Place detector at surface of patient	Met	Not met	Not applicable
19. Perform image efficiently	Met	Not met	Not applicable

**COMPLETING THE GI Bleed IMAGE:**

20. Process and label image correctly	Met	Not met	Not applicable
21. Present study to supervisor	Met	Not met	Not applicable
22. Prepare room for next patient	Met	Not met	Not applicable

**RADIATION / BIOHAZARDS:**

23. Observe precautions throughout study	Met	Not met	Not applicable
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**Competency Evaluation GI Bleed continued...**

**PROBLEM SOLVING:**

24. Recognizing problems & handle each appropriately	Met	Not met	Not applicable
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**\*Failure to perform this task constitutes an automatic failure of this competency.**

Comments:

After observing the student complete this study, I believe that he/she is competent to perform this study with minimal assistance.

Technologist: \_\_\_\_\_ Date: \_\_\_\_\_

# Competency Evaluation

## GALLIUM IMAGING

STUDENT: \_\_\_\_\_

DATE: \_\_\_\_\_

Before this evaluation is attempted, the student must have completed independently at least **3** gallium-imaging studies under the supervision of a technologist. The technologist evaluating the student should circle the performance level for each item.

### PATIENT CARE:

1. * Verify patient identification and written orders for study	Met	Not met	Not applicable
2. Communicate with patient (including procedure explanation)	Met	Not met	Not applicable
3. Obtain appropriate history	Met	Not met	Not applicable
4. Perform aseptic IV injection	Met	Not met	Not applicable
5. Provide appropriate patient care	Met	Not met	Not applicable
6. Assist in patient transfer	Met	Not met	Not applicable
7. Provide safe and dignified environment	Met	Not met	Not applicable
8. Discharge the patient	Met	Not met	Not applicable

### INSTRUMENTATION:

9. Calibrate camera for radionuclide	Met	Not met	Not applicable
10. Choose and install correct collimator	Met	Not met	Not applicable
11. Set acquisition parameters correctly	Met	Not met	Not applicable
12. Enter patient information	Met	Not met	Not applicable
13. Operate camera efficiently	Met	Not met	Not applicable

### PERFORM GALLIUM IMAGE:

14. Remove attenuating objects	Met	Not met	Not applicable
15. Request that patient void bladder	Met	Not met	Not applicable
16. Position patient correctly	Met	Not met	Not applicable
17. Compensate for positioning problems	Met	Not met	Not applicable
18. Place detector at surface of patient	Met	Not met	Not applicable
19. Perform image efficiently	Met	Not met	Not applicable

### COMPLETING THE GALLIUM IMAGE:

20. Process and label image correctly	Met	Not met	Not applicable
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**Competency Evaluation Gallium Imaging continued...**

21. Present study to supervisor	Met	Not met	Not applicable
22. Prepare room for next patient	Met	Not met	Not applicable

**RADIATION / BIOHAZARDS:**

23. Observe precautions throughout study	Met	Not met	Not applicable
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**PROBLEM SOLVING:**

24. Recognizing problems & handle each appropriately	Met	Not met	Not applicable
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**\*Failure to perform this task constitutes an automatic failure of this competency.**

Comments:

After observing the student complete this study, I believe that he/she is competent to perform this study with minimal assistance.

Technologist: \_\_\_\_\_ Date: \_\_\_\_\_

## Competency Evaluation

### GASTRIC EMPTY SCAN (GETS)

STUDENT: \_\_\_\_\_

DATE: \_\_\_\_\_

Before this evaluation is attempted, the student must have completed independently at least **3** gastric empty-imaging studies under the supervision of a technologist. The technologist evaluating the student should circle the performance level for each item.

#### PATIENT CARE:

1. * Verify patient identification and written orders for study	Met	Not met	Not applicable
2. Communicate with patient (including procedure explanation)	Met	Not met	Not applicable
3. Obtain appropriate history	Met	Not met	Not applicable
4. Administer dose (solid or liquid)	Met	Not met	Not applicable
5. Provide appropriate patient care	Met	Not met	Not applicable
6. Assist in patient transfer	Met	Not met	Not applicable
7. Provide safe and dignified environment	Met	Not met	Not applicable
8. Discharge the patient	Met	Not met	Not applicable

#### INSTRUMENTATION:

9. Calibrate camera for radionuclide	Met	Not met	Not applicable
10. Choose and install correct collimator	Met	Not met	Not applicable
11. Set acquisition parameters correctly	Met	Not met	Not applicable
12. Enter patient information	Met	Not met	Not applicable
13. Operate camera efficiently	Met	Not met	Not applicable

#### PERFORM GASTRIC EMPTY IMAGE:

14. Remove attenuating objects	Met	Not met	Not applicable
15. Wait appropriate time prior to image	Met	Not met	Not applicable
16. Position patient correctly	Met	Not met	Not applicable
17. Compensate for positioning problems	Met	Not met	Not applicable
18. Place detector at surface of patient	Met	Not met	Not applicable
19. Perform image efficiently	Met	Not met	Not applicable

#### COMPLETING THE GASTRIC EMPTY SCAN:

20. Process and label the image correctly	Met	Not met	Not applicable
21. Present study to supervisor	Met	Not met	Not applicable
22. Prepare room for next patient	Met	Not met	Not applicable

**RADIATION / BIOHAZARDS:**

23. Observe precautions throughout study	Met	Not met	Not applicable
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**Competency Evaluation Gastric Empty Scans continued...**

**PROBLEM SOLVING:**

24. Recognizing problems & handle each appropriately	Met	Not met	Not applicable
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**\*Failure to perform this task constitutes an automatic failure of this competency.**

Comments:

After observing the student complete this study, I believe that he/she is competent to perform this study with minimal assistance.

Technologist: \_\_\_\_\_ Date: \_\_\_\_\_

## Competency Evaluation

### GATED EQUILIBRIUM CARDIAC FUNCTION STUDY (ALSO CALLED ERNA OR MUGA)

STUDENT: \_\_\_\_\_

DATE: \_\_\_\_\_

Before this evaluation is attempted, the student must have completed independently at least **3** equilibrium cardiac function studies. The technologist evaluating the student should circle the performance level for each item.

#### PATIENT CARE / PREPARATION:

- |   |     |         |                |
|---|-----|---------|----------------|
| 1. * Verify patient identification and written orders for study   | Met | Not met | Not applicable |
| 2. Communicate with patient (including procedure explanation) (also verify correct patient preparation for study; rule out contraindications) | Met | Not met | Not applicable |
| 3. Obtain appropriate history (also verify correct patient preparation For study; rule out contraindications)                                 | Met | Not met | Not applicable |
| 4. Administer cold "PYP" IV using aseptic technique   | Met | Not met | Not applicable |
| 5. Administer radiopharmaceutical at appropriate time using aseptic technique   | Met | Not met | Not applicable |
| 6. Prepare sites and place ECG leads on patient   | Met | Not met | Not applicable |
| 7. Provide safe and dignified environment   | Met | Not met | Not applicable |
| 8. Observe universal and radiation safety precautions throughout test   | Met | Not met | Not applicable |
| 9. Assist patient to imaging table  | Met | Not met | Not applicable |

#### INSTRUMENTATION:

- |   |     |         |                |
|---|-----|---------|----------------|
| 10. Calibrate camera for radionuclide     | Met | Not met | Not applicable |
| 11. Choose and install correct collimator | Met | Not met | Not applicable |
| 12. Choose correct acquisition protocol   | Met | Not met | Not applicable |
| 13. Enter patient information             | Met | Not met | Not applicable |
| 14. Operate camera efficiently            | Met | Not met | Not applicable |

**PERFORM IMAGING:**

15. Remove attenuating materials	Met	Not met	Not applicable
16. Position patient correctly	Met	Not met	Not applicable
Ensure patient comfort to minimize motion; compensate for positioning problems	Met	Not met	Not applicable

**Competency Evaluation Gated Equilibrium Cardiac Function Study Continued...**

17. Place detector at appropriate distance	Met	Not met	Not applicable
18. Perform required views	Met	Not met	Not applicable

**COMPLETING THE STUDY AND COMPUTER PROCESSING:**

19. Choose the correct computer protocol	Met	Not met	Not applicable
20. Choose correct patient data	Met	Not met	Not applicable
21. Draw appropriate background ROI(s)	Met	Not met	Not applicable
22. Draw appropriate organ(s) ROI(s)	Met	Not met	Not applicable
23. Apply appropriate smoothing filters	Met	Not met	Not applicable
24. Generate time/activity curve	Met	Not met	Not applicable
25. Perform other quantitation, as required	Met	Not met	Not applicable
26. Display data in appropriate format	Met	Not met	Not applicable
27. Label data/images with appropriate information	Met	Not met	Not applicable
28. Place data/images on hard copy if required.	Met	Not met	Not applicable
29. Review data for technical quality and completeness	Met	Not met	Not applicable
30. Present study to supervisor	Met	Not met	Not applicable
31. Discharge the patient	Met	Not met	Not applicable
32. Prepare room for next patient	Met	Not met	Not applicable

**RADIATION / BIOHAZARDS:**

33. Observe precautions throughout study	Met	Not met	Not applicable
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**PROBLEM SOLVING:**

34. Recognize problems & handle each appropriately	Met	Not met	Not applicable
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**\*Failure to perform this task constitutes an automatic failure of this competency.**

Comments:

After observing the student, I believe that he/she is competent to perform this study with minimal assistance.

Technologist: \_\_\_\_\_ Date: \_\_\_\_\_



# Competency Evaluation

## HEPATOBIILIARY IMAGING

**STUDENT:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

Before this evaluation is attempted, the student must have completed independently at least **3** hepatobiliary studies under the supervision of a technologist. The technologist evaluating the student should circle the performance level for each item.

### PATIENT CARE:

1. * Verify patient identification and written orders for study	Met	Not met	Not applicable
2. Communicate with patient (including procedure explanation)	Met	Not met	Not applicable
3. Obtain appropriate history (also verify correct patient preparation for study; rule out contraindications)	Met	Not met	Not applicable
4. Perform aseptic IV injection	Met	Not met	Not applicable
5. Provide appropriate patient care	Met	Not met	Not applicable
6. Assist in patient transfer	Met	Not met	Not applicable
7. Provide safe and dignified environment	Met	Not met	Not applicable
8. Discharge the patient	Met	Not met	Not applicable

### INSTRUMENTATION:

9. Calibrate camera for radionuclide	Met	Not met	Not applicable
10. Choose and install correct collimator	Met	Not met	Not applicable
11. Set acquisition parameters correctly	Met	Not met	Not applicable
12. Enter patient information	Met	Not met	Not applicable
13. Operate camera efficiently	Met	Not met	Not applicable

### PERFORM HEPATOBIILIARY IMAGING:

14. Remove attenuating objects	Met	Not met	Not applicable
15. Position patient correctly	Met	Not met	Not applicable
16. Compensate for positioning problems	Met	Not met	Not applicable
17. Place detector at surface of patient	Met	Not met	Not applicable
18. Perform imaging efficiently	Met	Not met	Not applicable
19. Determine necessity of delayed images &/or administration of CCK or morphine	Met	Not met	Not applicable
20. Assist in the administration of CCK or morphine	Met	Not met	Not applicable

21. Perform additional images, as needed	Met	Not met	Not applicable
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**COMPLETING THE STUDY:**

22. Process and label the image correctly	Met	Not met	Not applicable
23. Present study to supervisor	Met	Not met	Not applicable
24. Prepare room for next patient	Met	Not met	Not applicable

**Competency Evaluation Hepatobiliary Imaging Continued...**

**RADIATION / BIOHAZARDS:**

25. Observe precautions throughout study	Met	Not met	Not applicable
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**PROBLEM SOLVING:**

26. Recognize problems & handle each appropriately	Met	Not met	Not applicable
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**\*Failure to perform this task constitutes an automatic failure of this competency.**

Comments:

After observing the student complete this study, I believe that he/she is competent to perform this study with minimal assistance.

Technologist: \_\_\_\_\_ Date: \_\_\_\_\_

# Competency Evaluation

## LIVER SPECT IMAGING

STUDENT: \_\_\_\_\_

DATE: \_\_\_\_\_

Before this evaluation is attempted, the student must have completed independently at least **3** liver SPECT-imaging studies under the supervision of a technologist. The technologist evaluating the student should circle the performance level for each item.

### PATIENT CARE:

1. * Verify patient identification and written orders for study	Met	Not met	Not applicable
2. Communicate with patient (including procedure explanation)	Met	Not met	Not applicable
3. Obtain appropriate history	Met	Not met	Not applicable
4. Perform aseptic IV injection	Met	Not met	Not applicable
5. Provide appropriate patient care	Met	Not met	Not applicable
6. Assist in patient transfer	Met	Not met	Not applicable
7. Provide safe and dignified environment	Met	Not met	Not applicable
8. Discharge the patient	Met	Not met	Not applicable

### INSTRUMENTATION:

9. Calibrate camera for radionuclide	Met	Not met	Not applicable
10. Choose and install correct collimator	Met	Not met	Not applicable
11. Set acquisition parameters correctly	Met	Not met	Not applicable
12. Enter patient information	Met	Not met	Not applicable
13. Operate camera efficiently	Met	Not met	Not applicable

### PERFORM LIVER SPECT IMAGE:

14. Remove attenuating objects	Met	Not met	Not applicable
15. Request that patient void bladder	Met	Not met	Not applicable
16. Position patient correctly	Met	Not met	Not applicable
17. Compensate for positioning problems	Met	Not met	Not applicable
18. Place detector at surface of patient	Met	Not met	Not applicable
19. Perform SPECT image efficiently	Met	Not met	Not applicable

### COMPLETING THE LIVER SPECT IMAGE:

20. Process and label the image correctly	Met	Not met	Not applicable
21. Present study to supervisor	Met	Not met	Not applicable

22. Prepare room for next patient	Met	Not met	Not applicable
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**RADIATION / BIOHAZARDS:**

23. Observe precautions throughout study	Met	Not met	Not applicable
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**Competency Evaluation Liver SPECT Imaging continued...**

**PROBLEM SOLVING:**

24. Recognizing problems & handle each appropriately	Met	Not met	Not applicable
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**\*Failure to perform this task constitutes an automatic failure of this competency.**

Comments:

After observing the student complete this study, I believe that he/she is competent to perform this study with minimal assistance.

Technologist: \_\_\_\_\_ Date: \_\_\_\_\_

# Competency Evaluation

## LUNG PERFUSION IMAGING

STUDENT: \_\_\_\_\_

DATE: \_\_\_\_\_

Before this evaluation is attempted, the student must have completed independently at least **3** lung perfusion studies under the supervision of a technologist. The technologist evaluating the student should circle the performance level for each item.

### PATIENT CARE:

1. Verify patient identification and written orders for study	Met	Not met	Not applicable
2. Communicate with patient (including procedure explanation)	Met	Not met	Not applicable
3. Obtain appropriate history (also verify correct patient preparation for study; rule out contraindications)	Met	Not met	Not applicable
4. Perform aseptic IV injection	Met	Not met	Not applicable
5. Provide appropriate patient care	Met	Not met	Not applicable
6. Assist in patient transfer	Met	Not met	Not applicable
7. Provide safe and dignified environment	Met	Not met	Not applicable
8. Discharge the patient	Met	Not met	Not applicable

### INSTRUMENTATION:

9. Calibrate camera for radionuclide	Met	Not met	Not applicable
10. Choose and install correct collimator	Met	Not met	Not applicable
11. Set acquisition parameters correctly	Met	Not met	Not applicable
12. Enter patient information	Met	Not met	Not applicable
13. Operate camera efficiently	Met	Not met	Not applicable

### PERFORM IMAGING:

14. Remove attenuating objects	Met	Not met	Not applicable
15. Position patient correctly	Met	Not met	Not applicable
16. Compensate for positioning problems	Met	Not met	Not applicable
17. Place detector at surface of patient	Met	Not met	Not applicable
18. Perform imaging efficiently			

### COMPLETING THE STUDY:

19. Process and label the image correctly	Met	Not met	Not applicable
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20. Present study to supervisor	Met	Not met	Not applicable
21. Prepare room for next patient	Met	Not met	Not applicable

**RADIATION / BIOHAZARDS:**

22. Observe precautions throughout study	Met	Not met	Not applicable
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*Competency Evaluation Lung Perfusion Imaging continued...*

**PROBLEM SOLVING:**

23. Recognize problems & handle each appropriately	Met	Not met	Not applicable
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**\* Failure to perform this task constitutes an automatic failure of this competency.**

Comments:

After observing the student complete this study, I believe that he/she is competent to perform this study with minimal assistance.

Technologist: \_\_\_\_\_ Date: \_\_\_\_\_

## Competency Evaluation

### LUNG VENTILATION IMAGING (GAS OR AEROSOL)

STUDENT: \_\_\_\_\_

DATE: \_\_\_\_\_

Before this evaluation is attempted, the student must have completed independently at least **3** lung ventilation studies under the supervision of a technologist. The technologist evaluating the student should circle the performance level for each item.

#### PATIENT CARE:

1. * Verify patient identification and written orders for study	Met	Not met	Not applicable
2. Communicate with patient (including procedure explanation)	Met	Not met	Not applicable
3. Obtain appropriate history (also verify correct patient preparation for study; rule out contraindications)	Met	Not met	Not applicable
4. Provide appropriate patient care	Met	Not met	Not applicable
5. Assist in patient transfer	Met	Not met	Not applicable
6. Provide safe and dignified environment	Met	Not met	Not applicable
7. Discharge the patient	Met	Not met	Not applicable

#### INSTRUMENTATION:

8. Calibrate camera for radionuclide	Met	Not met	Not applicable
9. Choose and install correct collimator	Met	Not met	Not applicable
10. Set acquisition parameters correctly	Met	Not met	Not applicable
11. Enter patient information	Met	Not met	Not applicable
12. Operate camera efficiently	Met	Not met	Not applicable
13. Set up & operate xenon or aerosol administration apparatus	Met	Not met	Not applicable

#### PERFORM IMAGING:

14. Remove attenuating objects	Met	Not met	Not applicable
15. Instruct patient about administration apparatus	Met	Not met	Not applicable
16. Position patient correctly (includes placement of gas or aerosol administration apparatus)	Met	Not met	Not applicable
17. Compensate for positioning problems	Met	Not met	Not applicable
18. Place detector at surface of patient	Met	Not met	Not applicable



19. Perform imaging efficiently	Met	Not met	Not applicable
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**COMPLETING THE STUDY:**

20. Process and label the image correctly	Met	Not met	Not applicable
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21. Present study to supervisor	Met	Not met	Not applicable
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22. Prepare room for next patient	Met	Not met	Not applicable
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***Competency Evaluation Lung Ventilation Imaging continued...***

**RADIATION / BIOHAZARDS:**

23. Observe precautions throughout study	Met	Not met	Not applicable
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**PROBLEM SOLVING:**

24. Recognize problems & handle each appropriately	Met	Not met	Not applicable
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**\*Failure to perform this task constitutes an automatic failure of this competency.**

Comments:

After observing the student complete this study, I believe that he/she is competent to perform this study with minimal assistance.

Technologist: \_\_\_\_\_ Date: \_\_\_\_\_

# Competency Evaluation

## LYMPHOSCINTIGRAPHY

STUDENT: \_\_\_\_\_

DATE: \_\_\_\_\_

Before this evaluation is attempted, the student must have completed independently at least **3** lymphoscintigraphy studies under the supervision of a technologist. The technologist evaluating the student should circle the performance level for each item.

### PATIENT CARE:

1. * Verify patient identification and written orders for study	Met	Not met	Not applicable
2. Communicate with patient (including procedure explanation)	Met	Not met	Not applicable
3. Obtain appropriate history (also verify correct patient preparation for study; rule out contraindications)	Met	Not met	Not applicable
4. Perform or assist in injection	Met	Not met	Not applicable
5. Provide appropriate patient care	Met	Not met	Not applicable
6. Assist in patient transfer	Met	Not met	Not applicable
7. Provide safe and dignified environment	Met	Not met	Not applicable
8. Discharge the patient	Met	Not met	Not applicable

### INSTRUMENTATION:

9. Calibrate camera for radionuclide	Met	Not met	Not applicable
10. Choose and install correct collimator	Met	Not met	Not applicable
11. Set acquisition parameters correctly	Met	Not met	Not applicable
12. Enter patient information	Met	Not met	Not applicable
13. Operate camera efficiently	Met	Not met	Not applicable

### PERFORM LYMPHOSCINTIGRAPHY IMAGING:

14. Remove attenuating objects	Met	Not met	Not applicable
15. Position patient correctly	Met	Not met	Not applicable
16. Compensate for positioning problems	Met	Not met	Not applicable
17. Place detector at surface of patient	Met	Not met	Not applicable
18. Perform imaging efficiently	Met	Not met	Not applicable
19. Determine necessity of delayed images	Met	Not met	Not applicable
20. Perform additional images, as needed	Met	Not met	Not applicable

21.

**COMPLETING THE STUDY:**

22. Process and label the image correctly	Met	Not met	Not applicable
23. Present study to supervisor	Met	Not met	Not applicable
24. Prepare room for next patient	Met	Not met	Not applicable

**RADIATION / BIOHAZARDS:**

25. Observe precautions throughout study	Met	Not met	Not applicable
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*Competency Evaluation Lymphoscintigraphy Imaging continued...*

**PROBLEM SOLVING:**

26. Recognize problems & handle each appropriately	Met	Not met	Not applicable
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**\*Failure to perform this task constitutes an automatic failure of this competency.**

Comments:

After observing the student complete this study, I believe that he/she is competent to perform this study with minimal assistance.

Technologist: \_\_\_\_\_ Date: \_\_\_\_\_

## Competency Evaluation

### MECKEL'S DIVERTICULUM IMAGING

STUDENT: \_\_\_\_\_

DATE: \_\_\_\_\_

Before this evaluation is attempted, the student must have completed independently at least **3** Meckel's-imaging studies under the supervision of a technologist. The technologist evaluating the student should circle the performance level for each item.

#### PATIENT CARE:

1. * Verify patient identification and written orders for study	Met	Not met	Not applicable
2. Communicate with patient (including procedure explanation)	Met	Not met	Not applicable
3. Obtain appropriate history	Met	Not met	Not applicable
4. Draw blood and perform aseptic IV injection	Met	Not met	Not applicable
5. Provide appropriate patient care	Met	Not met	Not applicable
6. Assist in patient transfer	Met	Not met	Not applicable
7. Provide safe and dignified environment	Met	Not met	Not applicable
8. Discharge the patient	Met	Not met	Not applicable

#### INSTRUMENTATION:

9. Calibrate camera for radionuclide	Met	Not met	Not applicable
10. Choose and install correct collimator	Met	Not met	Not applicable
11. Set acquisition parameters correctly	Met	Not met	Not applicable
12. Enter patient information	Met	Not met	Not applicable
13. Operate camera efficiently	Met	Not met	Not applicable

#### PERFORM MECKEL'S IMAGE:

14. Remove attenuating objects	Met	Not met	Not applicable
15. Request that patient void bladder	Met	Not met	Not applicable
16. Position patient correctly	Met	Not met	Not applicable
17. Compensate for positioning problems	Met	Not met	Not applicable
18. Place detector at surface of patient	Met	Not met	Not applicable
19. Perform image efficiently	Met	Not met	Not applicable

#### COMPLETING THE MECKEL'S IMAGE:

20. Process and label the image correctly	Met	Not met	Not applicable
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21. Present study to supervisor	Met	Not met	Not applicable
22. Prepare room for next patient	Met	Not met	Not applicable

**RADIATION / BIOHAZARDS:**

23. Observe precautions throughout study	Met	Not met	Not applicable
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*Competency Evaluation Meckel's Diverticulum Imaging...*

**PROBLEM SOLVING:**

24. Recognizing problems & handle each appropriately	Met	Not met	Not applicable
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**\*Failure to perform this task constitutes an automatic failure of this competency.**

Comments:

After observing the student complete this study, I believe that he/she is competent to perform this study with minimal assistance.

Technologist: \_\_\_\_\_ Date: \_\_\_\_\_

# Competency Evaluation

## PARATHYROID IMAGING

STUDENT: \_\_\_\_\_

DATE: \_\_\_\_\_

Before this evaluation is attempted, the student must have completed independently at least **3** parathyroid-imaging studies under the supervision of a technologist. The technologist evaluating the student should circle the performance level for each item.

### PATIENT CARE:

1. * Verify patient identification and written orders for study	Met	Not met	Not applicable
2. Communicate with patient (including procedure explanation)	Met	Not met	Not applicable
3. Obtain appropriate history	Met	Not met	Not applicable
4. Perform aseptic IV injection	Met	Not met	Not applicable
5. Provide appropriate patient care	Met	Not met	Not applicable
6. Assist in patient transfer	Met	Not met	Not applicable
7. Provide safe and dignified environment	Met	Not met	Not applicable
8. Discharge the patient	Met	Not met	Not applicable

### INSTRUMENTATION:

9. Calibrate camera for radionuclide	Met	Not met	Not applicable
10. Choose and install correct collimator	Met	Not met	Not applicable
11. Set acquisition parameters correctly	Met	Not met	Not applicable
12. Enter patient information	Met	Not met	Not applicable
13. Operate camera efficiently	Met	Not met	Not applicable

### PERFORM PARATHYROID IMAGE:

14. Remove attenuating objects	Met	Not met	Not applicable
15. Request that patient void bladder	Met	Not met	Not applicable
16. Position patient correctly	Met	Not met	Not applicable
17. Compensate for positioning problems	Met	Not met	Not applicable
18. Place detector at surface of patient	Met	Not met	Not applicable
19. Perform image efficiently	Met	Not met	Not applicable

### COMPLETING THE PARATHYROID IMAGE:

20. Process and label the image correctly	Met	Not met	Not applicable
21. Present study to supervisor	Met	Not met	Not applicable

22. Prepare room for next patient	Met	Not met	Not applicable
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**RADIATION / BIOHAZARDS:**

23. Observe precautions throughout study	Met	Not met	Not applicable
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**Competency Evaluation Parathyroid Imaging continued...**

**PROBLEM SOLVING:**

24. Recognizing problems & handle each appropriately	Met	Not met	Not applicable
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**\*Failure to perform this task constitutes an automatic failure of this competency.**

Comments:

After observing the student complete this study, I believe that he/she is competent to perform this study with minimal assistance.

Technologist: \_\_\_\_\_ Date: \_\_\_\_\_



# Competency Evaluation

## RENAL FUNCTION STUDY

**STUDENT:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

Before this evaluation is attempted, the student must have completed independently at least **3** renal function studies under the supervision of a technologist. The technologist evaluating the student should circle the performance level for each item.

### PATIENT CARE:

1.	*Verify patient identification and written orders for study	Met	Not met	Not applicable
2.	Communicate with patient (including procedure explanation)	Met	Not met	Not applicable
3.	Obtain appropriate history (also verify correct patient preparation for study; rule out contraindications)	Met	Not met	Not applicable
4.	Perform aseptic IV injection	Met	Not met	Not applicable
5.	Provide appropriate patient care	Met	Not met	Not applicable
6.	Assist in patient transfer	Met	Not met	Not applicable
7.	Provide safe and dignified environment	Met	Not met	Not applicable
8.	Discharge the patient	Met	Not met	Not applicable

### INSTRUMENTATION:

9.	Calibrate camera for radionuclide	Met	Not met	Not applicable
10.	Choose and install correct collimator	Met	Not met	Not applicable
11.	Set acquisition parameters correctly	Met	Not met	Not applicable
12.	Enter patient information	Met	Not met	Not applicable
14.	Operate camera efficiently	Met	Not met	Not applicable

**PERFORM RENAL FUNCTION STUDY:**

15.	Remove attenuating objects	Met	Not met	Not applicable
16.	Position patient correctly	Met	Not met	Not applicable
17.	Compensate for positioning problems	Met	Not met	Not applicable
18.	Place detector at surface of patient	Met	Not met	Not applicable
19.	Perform imaging efficiently	Met	Not met	Not applicable
20.	Determine necessity for delayed images &/or administration of furosemide	Met	Not met	Not applicable
21.	Assist in the administration of furosemide	Met	Not met	Not applicable
22.	Perform additional images, as needed	Met	Not met	Not applicable
23.	Collect blood/urine samples at appropriate times	Met	Not met	Not applicable

**COMPLETING THE STUDY AND COMPUTER PROCESSING:**

24.	Choose the correct computer protocol	Met	Not met	Not applicable
25.	Choose correct patient data	Met	Not met	Not applicable
26.	Draw appropriate background ROI(s)	Met	Not met	Not applicable
27.	Draw appropriate organ(s) ROI(s)	Met	Not met	Not applicable
28.	Apply appropriate smoothing filters	Met	Not met	Not applicable
29.	Generate time/activity curve	Met	Not met	Not applicable
30.	Perform other quantitation, as required	Met	Not met	Not applicable
31.	Display data in appropriate format	Met	Not met	Not applicable
32.	Label data/images with appropriate information	Met	Not met	Not applicable
33.	Place data/images on hard copy, if required	Met	Not met	Not applicable
34.	Review data for technical quality and completeness	Met	Not met	Not applicable
35.	Present study to supervisor	Met	Not met	Not applicable
36.	Prepare room for next patient	Met	Not met	Not applicable

**RADIATION / BIOHAZARDS:**

37.	Observe precautions throughout study	Met	Not met	Not applicable
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**Competency Evaluation Renal Function Study Continued...**

**PROBLEM SOLVING:**

38.	Recognize problems & handle each appropriately	Met	Not met	Not applicable
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**\*Failure to perform this task constitutes an automatic failure of this competency.**

Comments:

After observing the student complete this study, I believe that he/she is competent to perform this study with minimal assistance.

Technologist: \_\_\_\_\_ Date \_\_\_\_\_

# Competency Evaluation

## THYROID IMAGING

**STUDENT:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

Before this evaluation is attempted, the student must have completed independently at least **3** thyroid images under the supervision of a technologist. The technologist evaluating the student should circle the performance level for each item.

### PATIENT CARE:

1.	*Verify patient identification and written orders for study	Met	Not met	Not applicable
2.	Communicate with patient (including procedure explanation)	Met	Not met	Not applicable
3.	Obtain appropriate history (also verify correct patient preparation for study; rule out contraindications)	Met	Not met	Not applicable
4.	Perform aseptic IV injection or administer capsule	Met	Not met	Not applicable
5.	Provide appropriate patient care	Met	Not met	Not applicable
6.	Assist in patient transfer	Met	Not met	Not applicable
7.	Provide safe and dignified environment	Met	Not met	Not applicable

### INSTRUMENTATION:

8.	Calibrate camera for radionuclide	Met	Not met	Not applicable
9.	Choose and install correct collimator	Met	Not met	Not applicable
10.	Set acquisition parameters correctly	Met	Not met	Not applicable
11.	Enter patient information	Met	Not met	Not applicable
12.	Operate camera efficiently	Met	Not met	Not applicable

### PERFORM IMAGING:

13.	Wait appropriate time following tracer administration	Met	Not met	Not applicable
14.	Remove attenuating objects	Met	Not met	Not applicable

**Competency Evaluation Thyroid Imaging Continued...**

15.	Position patient correctly	Met	Not met	Not applicable
16.	Compensate for positioning problems	Met	Not met	Not applicable
17.	Place detector at correct distance from patient	Met	Not met	Not applicable
18.	Perform imaging efficiently	Met	Not met	Not applicable
19.	Perform additional images, as needed	Met	Not met	Not applicable

**COMPLETING THE STUDY:**

20.	Process and label the images correctly	Met	Not met	Not applicable
21.	Place in hard copy format, if required	Met	Not met	Not applicable
22.	Present study to supervisor	Met	Not met	Not applicable
23.	Prepare room for next patient	Met	Not met	Not applicable

**RADIATION / BIOHAZARDS:**

24.	Observe precautions throughout study	Met	Not met	Not applicable
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**PROBLEM SOLVING:**

25.	Recognize problems & handle each appropriately	Met	Not met	Not applicable
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**\*Failure to perform this task constitutes an automatic failure of this competency.**

Comments:

After observing the student complete this study, I believe that he/she is competent to perform this study with minimal assistance.

Technologist: \_\_\_\_\_ Date: \_\_\_\_\_

# Competency Evaluation

## THYROID UPTAKE

STUDENT: \_\_\_\_\_

DATE: \_\_\_\_\_

Before this evaluation is attempted, the student must have completed independently at least **3** thyroid uptakes under the supervision of a technologist. The technologist evaluating the student should circle the performance level for each item.

### PATIENT CARE:

1. * Verify patient identification and written orders for study	Met	Not met	Not applicable
2. Communicate with patient (including procedure explanation)	Met	Not met	Not applicable
3. Obtain appropriate history (also verify correct patient preparation for study; rule out contraindications)	Met	Not met	Not applicable
4. Administer capsule	Met	Not met	Not applicable
5. Provide appropriate patient care	Met	Not met	Not applicable
6. Assist in patient transfer	Met	Not met	Not applicable
7. Provide safe and dignified environment	Met	Not met	Not applicable

### INSTRUMENTATION:

8. Calibrate uptake probe for radionuclide	Met	Not met	Not applicable
9. Acquire room background	Met	Not met	Not applicable

### PERFORM UPTAKE:

10. Wait appropriate time following tracer administration	Met	Not met	Not applicable
11. Remove attenuating objects	Met	Not met	Not applicable
12. Position patient correctly	Met	Not met	Not applicable
13. Place detector at correct distance from patient	Met	Not met	Not applicable
14. Collect neck and thigh counts for appropriate time interval	Met	Not met	Not applicable
15. Collect standard counts for appropriate time interval	Met	Not met	Not applicable

### COMPLETING THE STUDY:

16. Label data correctly	Met	Not met	Not applicable
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17. Perform uptake calculation correctly	Met	Not met	Not applicable
18. Present data to supervisor	Met	Not met	Not applicable
19. Discharge the patient	Met	Not met	Not applicable



**Competency Evaluation Thyroid Uptake continued...**

**RADIATION / BIOHAZARDS:**

20. Observe precautions throughout study	Met	Not met	Not applicable
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**PROBLEM SOLVING:**

21. Recognize problems & handle each appropriately	Met	Not met	Not applicable
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**\*Failure to perform this task constitutes an automatic failure of this competency.**

Comments:

After observing the student complete this study, I believe that he/she is competent to perform this study with minimal assistance.

Technologist: \_\_\_\_\_ Date: \_\_\_\_\_

## Competency Evaluation

### THYROID: ABLATION THERAPEUTIC PROCEDURE

STUDENT: \_\_\_\_\_

DATE: \_\_\_\_\_

Before this evaluation is attempted, the student must have completed independently at least **3** thyroid: ablation procedures under the supervision of a technologist. The technologist evaluating the student should circle the performance level for each item.

#### PATIENT CARE:

1. * Verify patient identification and written orders for study	Met	Not met	Not applicable
2. Communicate with patient (including procedure explanation)	Met	Not met	Not applicable
3. Obtain appropriate history	Met	Not met	Not applicable
4. Ensure patient is NOT pregnant	Met	Not met	Not applicable
5. Provide appropriate patient care	Met	Not met	Not applicable
6. Answer all patient questions	Met	Not met	Not applicable
7. Provide safe and dignified environment	Met	Not met	Not applicable
8. Discharge the patient	Met	Not met	Not applicable

#### ADMINISTRATION:

9. Properly paper the patient's room			
10. Verify the dose with a witness	Met	Not met	Not applicable
11. Administer the dose	Met	Not met	Not applicable
12. Attach proper signage to doors	Met	Not met	Not applicable
13. Monitor the patient's exposure levels	Met	Not met	Not applicable

#### RADIATION / BIOHAZARD

14. Observe precautions throughout study	Met	Not met	Not applicable
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#### PROBLEM SOLVING:

15. Recognizing problems & handle each appropriately	Met	Not met	Not applicable
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**\*Failure to perform this task constitutes an automatic failure of this competency.**

Comments:

After observing the student complete this study, I believe that he/she is competent to perform this study with minimal assistance.

Technologist: \_\_\_\_\_ Date: \_\_\_\_\_

## Competency Evaluation

### THYROID: HYPERTHYROIDISM

STUDENT: \_\_\_\_\_

DATE: \_\_\_\_\_

Before this evaluation is attempted, the student must have completed independently at least **3** thyroid: hyperthyroidism procedures under the supervision of a technologist. The technologist evaluating the student should circle the performance level for each item.

#### PATIENT CARE:

1. * Verify patient identification and written orders for study	Met	Not met	Not applicable
2. Communicate with patient (including procedure explanation)	Met	Not met	Not applicable
3. Obtain appropriate history	Met	Not met	Not applicable
4. Ensure patient is NOT pregnant	Met	Not met	Not applicable
5. Provide appropriate patient care	Met	Not met	Not applicable
6. Answer all patient questions	Met	Not met	Not applicable
7. Provide safe and dignified environment	Met	Not met	Not applicable
8. Discharge the patient	Met	Not met	Not applicable

#### ADMINISTRATION:

9. Verify the dose with a witness	Met	Not met	Not applicable
10. Administer the dos	Met	Not met	Not applicable

#### RADIATION / BIOHAZARDS:

11. Observe precautions throughout study	Met	Not met	Not applicable
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#### PROBLEM SOLVING:

12. Recognizing problems & handle each appropriately	Met	Not met	Not applicable
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**\*Failure to perform this task constitutes an automatic failure of this competency.**

Comments:

After observing the student complete this study, I believe that he/she is competent to perform this study with minimal assistance.

Technologist: \_\_\_\_\_ Date: \_\_\_\_\_

# Competency Evaluation

## TUMOR SPECT IMAGING

STUDENT: \_\_\_\_\_

DATE: \_\_\_\_\_

Before this evaluation is attempted, the student must have completed independently at least **3** tumor SPECT-imaging studies under the supervision of a technologist. The technologist evaluation the student should circle the performance level for each item.

### PATIENT CARE:

1. * Verify patient identification and written orders for study	Met	Not met	Not applicable
2. Communicate with patient (including procedure explanation)	Met	Not met	Not applicable
3. Obtain appropriate history	Met	Not met	Not applicable
4. Perform aseptic IV injection	Met	Not met	Not applicable
5. Provide appropriate patient care	Met	Not met	Not applicable
6. Assist in patient transfer	Met	Not met	Not applicable
7. Provide safe and dignified environment	Met	Not met	Not applicable
8. Discharge the patient	Met	Not met	Not applicable

### INSTRUMENTATION:

9. Calibrate camera for radionuclide	Met	Not met	Not applicable
10. Choose and install correct collimator	Met	Not met	Not applicable
11. Set acquisition parameters correctly	Met	Not met	Not applicable
12. Enter patient information	Met	Not met	Not applicable
13. Choose firm, intensity, display	Met	Not met	Not applicable
14. Operate camera efficiently	Met	Not met	Not applicable

### PERFORM TUMOR SPECT IMAGE:

15. Remove attenuating objects	Met	Not met	Not applicable
16. Request that patient void bladder	Met	Not met	Not applicable
17. Position patient correctly	Met	Not met	Not applicable
18. Compensate for positioning problems	Met	Not met	Not applicable
19. Place detector at surface of patient	Met	Not met	Not applicable
20. Perform SPECT image efficiently	Met	Not met	Not applicable

### COMPLETING THE TUMOR SPECT IMAGE:

21. Film Study	Met	Not met	Not applicable
22. Label film correctly	Met	Not met	Not applicable
23. Present study to supervisor	Met	Not met	Not applicable

24. Prepare room for next patient	Met	Not met	Not applicable
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**RADIATION/BIOHAZARDS:**

25. Observe precautions throughout study	Met	Not met	Not applicable
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**Competency Evaluation Tumor SPECT Imaging continued...**

**PROBLEM SOLVING:**

26. Recognizing problems & handle each appropriately	Met	Not met	Not applicable
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**\*Failure to perform this task constitutes an automatic failure of this competency.**

Comments:

After observing the student complete this study, I believe that he/she is competent to perform this study with minimal assistance.

Technologist: \_\_\_\_\_ Date: \_\_\_\_\_



# Competency Evaluation

## WHITE BLOOD CELL LABELING INFECTION IMAGING

STUDENT: \_\_\_\_\_

DATE: \_\_\_\_\_

Before this evaluation is attempted, the student must have completed independently at least **3** white blood cell labeling infection imaging studies under the supervision of a technologist. The technologist evaluation the student should circle the performance level for each item.

### PATIENT CARE:

1. * Verify patient identification and written orders for study	Met	Not met	Not applicable
2. Communicate with patient (including procedure explanation)	Met	Not met	Not applicable
3. Obtain appropriate history	Met	Not met	Not applicable
4. Perform aseptic IV blood draw	Met	Not met	Not applicable
5. *Label blood product with patient name and information	Met	Not met	Not applicable
6. *Verify patient identification matches information on white blood cell product	Met	Not met	Not applicable
7. Perform aseptic IV injection of tagged white blood cells	Met	Not met	Not applicable
8. Provide appropriate patient care	Met	Not met	Not applicable
9. Assist in patient transfer	Met	Not met	Not applicable
10. Provide safe and dignified environment	Met	Not met	Not applicable
11. Discharge the patient	Met	Not met	Not applicable

### INSTRUMENTATION:

12. Calibrate camera for radionuclide	Met	Not met	Not applicable
13. Choose and install correct collimator	Met	Not met	Not applicable
14. Set acquisition parameters correctly	Met	Not met	Not applicable
15. Enter patient information	Met	Not met	Not applicable
16. Operate camera efficiently	Met	Not met	Not applicable

### PERFORM WHITE BLOOD CELL IMAGE:

17. Remove attenuating objects	Met	Not met	Not applicable
18. Position patient correctly	Met	Not met	Not applicable
19. Compensate for positioning problems	Met	Not met	Not applicable
20. Place detector at surface of patient	Met	Not met	Not applicable
21. Perform image efficiently	Met	Not met	Not applicable

**COMPLETING WHITE BLOOD CELL IMAGE:**

22. Process and label image correctly	Met	Not met	Not applicable
23. Present study to supervisor	Met	Not met	Not applicable
24. Prepare room for next patient	Met	Not met	Not applicable

**Competency Evaluation White Blood Labeling Infection Imaging continued...**

**RADIATION/BIOHAZARDS:**

25. Observe precautions throughout study	Met	Not met	Not applicable
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**PROBLEM SOLVING:**

26. Recognizing problems & handle each appropriately	Met	Not met	Not applicable
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**\*Failure to perform this task constitutes an automatic failure of this competency.**

Comments:

After observing the student complete this study, I believe that he/she is competent to perform this study with minimal assistance.

Technologist: \_\_\_\_\_ Date: \_\_\_\_\_

**COMPETENCIES:**

## **NUCLEAR CARDIOLOGY**

## Competency Evaluation

### STRESS TEST

STUDENT: \_\_\_\_\_

DATE: \_\_\_\_\_

Before this evaluation is attempted, the student must have participated in at least **5** stress tests. The technologist evaluating the student should circle the performance level for each item.

1. * Verify patient identification and written orders for study	Met	Not met	Not applicable
2. Communicate with patient (including procedure explanation)	Met	Not met	Not applicable
3. Obtain appropriate history (also verify correct patient preparation for study; rule out contraindications)	Met	Not met	Not applicable
4. Establish IV line	Met	Not met	Not applicable
5. Prepare sites and place ECG leads on patient	Met	Not met	Not applicable
6. Obtain baseline blood pressure, pulse, and ECG tracing	Met	Not met	Not applicable
7. Administer radiopharmaceutical when directed during stress test	Met	Not met	Not applicable
8. Provide safe and dignified environment	Met	Not met	Not applicable
9. Observe universal and radiation safety precautions throughout test	Met	Not met	Not applicable
10. Assist patient to imaging table	Met	Not met	Not applicable
11. Prepare room for next patient	Met	Not met	Not applicable

**\*Failure to perform this task constitutes an automatic failure of this competency.**

Comments:

After observing the student complete this study, I believe that he/she is competent to participate in stress testing with minimal assistance.

Technologist: \_\_\_\_\_ Date: \_\_\_\_\_

# Competency Evaluation

## MYOCARDIAL PERFUSION IMAGING AND TOMOGRAPHIC PROCESSING

STUDENT: \_\_\_\_\_

DATE: \_\_\_\_\_

Before this evaluation is attempted, the student must have participated in at least 5 stress/rest tomographic myocardial perfusion studies. The technologist evaluating the student should circle the performance level for each item.

### PATIENT CARE:

1. * Verify patient identification and written orders for study	Met	Not met	Not applicable
2. Communicate with patient (including procedure explanation)	Met	Not met	Not applicable
3. Obtain appropriate history (also verify correct patient preparation for study; rule out contraindications)	Met	Not met	Not applicable
4. Administer radiopharmaceutical for rest images at appropriate time	Met	Not met	Not applicable
5. Provide safe and dignified environment	Met	Not met	Not applicable
6. Assist patient to imaging table	Met	Not met	Not applicable

### INSTRUMENTATION

7. Calibrate camera for radionuclide	Met	Not met	Not applicable
8. Choose and install correct collimator	Met	Not met	Not applicable
9. Set acquisition parameters correctly	Met	Not met	Not applicable
10. Enter patient information	Met	Not met	Not applicable
11. Operate camera efficiently	Met	Not met	Not applicable

### PERFORM IMAGING:

12. Remove attenuating materials	Met	Not met	Not applicable
13. Position patient correctly	Met	Not met	Not applicable
14. Ensure patient comfort to minimize motion	Met	Not met	Not applicable
15. Place detector at appropriate distance	Met	Not met	Not applicable
16. Perform second set of images (rest or stress) using same acquisition parameters as first	Met	Not met	Not applicable

**PROCESSING**

17. Choose the correct computer protocol	Met	Not met	Not applicable
18. Choose correct patient data	Met	Not met	Not applicable
19. Choose area to be reconstructed into transaxial slices	Met	Not met	Not applicable
20. Apply appropriate filters	Met	Not met	Not applicable



**Competency Evaluation Myocardial Perfusion Imaging and Tomographic Processing Continued...**

21. Draw angles on transaxial and vertical long axes to reorient data	Met	Not met	Not applicable
22. Review representative slices in 3 planes to ensure correct angles were drawn	Met	Not met	Not applicable
23. Repeat 3-6 second data set	Met	Not met	Not applicable
24. Perform quantitation, if required	Met	Not met	Not applicable
25. Display rest/stress slices in appropriate format	Met	Not met	Not applicable
26. Label images with appropriate information	Met	Not met	Not applicable
27. Place images on hard copy, if required	Met	Not met	Not applicable
28. Label film with appropriate information	Met	Not met	Not applicable

**COMPLETING THE STUDY:**

29. Discharge the patient	Met	Not met	Not applicable
30. Prepare room for next patient	Met	Not met	Not applicable

**RADIATION / BIOHAZARDS:**

31. Observe precautions throughout study	Met	Not met	Not applicable
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**PROBLEM SOLVING:**

32. Recognize problems & handle each appropriately	Met	Not met	Not applicable
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**\*Failure to perform this task constitutes an automatic failure of this competency.**

Comments:

After observing the student complete this study, I believe that he/she is competent to perform tomographic myocardial imaging with minimal assistance.

Technologist: \_\_\_\_\_ Date: \_\_\_\_\_

# Competency Evaluation

## INTRAVENOUS CATHETER PLACEMENT

STUDENT: \_\_\_\_\_

DATE: \_\_\_\_\_

Before this evaluation is attempted, the student must have processed independently at least **8** intravenous catheter placements under the supervision of a technologist. The technologist evaluating the student should circle the performance level for each item.

This is an optional competency that can be obtained at clinical sites allowing students to practice IV catheter placement.

1. * Verify written orders for the study	Met	Not met	Not applicable
2. * Verify patient identification	Met	Not met	Not applicable
3. Use effective communication skills	Met	Not met	Not applicable
4. Assemble catheter materials (proper catheter size/gauge, gauze, alcohol, tape, saline bag or syringe with bubbles properly "bled" through line or syringe so that no air pockets remain)	Met	Not met	Not applicable
5. Choose appropriate site (position, assessment)	Met	Not met	Not applicable
6. * Wear gloves	Met	Not met	Not applicable
7. Place tourniquet correctly (occlude vein; 2-3 in. above site)	Met	Not met	Not applicable
8. * Use appropriate aseptic technique (alcohol prep used to swab site in spiral inward to outward motion; re-swab if repeat palpitation)	Met	Not met	Not applicable
9. Handle catheter proficiently (bevel up, anchor vein, insert into vein at shallow depth, smooth entry, catheter penetrates top wall of vein with sufficient depth and look for "flash back" of blood into catheter unit)	Met	Not met	Not applicable
10. Thread catheter into vein (push sheath of catheter into vein watching for possible kinks)	Met	Not met	Not applicable
11. Remove catheter needle	Met	Not met	Not applicable
12. Attach tubing and/or syringe to catheter bulb	Met	Not met	Not applicable

13. Open saline or test syringe for patient venous access	Met	Not met	Not applicable
14. * Dispose of catheter needle in appropriate Sharps container	Met	Not met	Not applicable
15. Securely tape catheter placement to patient	Met	Not met	Not applicable

***Competency Evaluation IV Catheter Placement continued...***

16. Adjust flow of saline to patient	Met	Not met	Not applicable
17. * Demonstrate proper universal precautions techniques throughout procedure	Met	Not met	Not applicable

**\*Failure to perform these tasks constitutes an automatic failure of this competency. Student must complete an additional 8 intravenous catheter placements under the supervision of a technologist before attempting the competency evaluation a second time.**

Comments:

After observing the student complete this study, I believe that he/she is competent to perform an intravenous catheter placement independently.

Technologist: \_\_\_\_\_ Date: \_\_\_\_\_

## Competency Evaluation

### ATTENUATION CORRECTION

**STUDENT:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

Before this evaluation is attempted, the student must have processed independently at least **5** attenuation corrections under the supervision of a technologist. The technologist evaluating the student should circle the performance level for each item.

#### PATIENT CARE:

1. *Verify patient identification and written orders for study	Met	Not met	Not applicable
2. Communicate with patient (including procedure explanation)	Met	Not met	Not applicable
3. Provide appropriate patient care	Met	Not met	Not applicable
4. Assist in patient transfer	Met	Not met	Not applicable
5. Provide safe and dignified environment	Met	Not met	Not applicable

#### INSTRUMENTATION:

6 Calibrate camera for radioisotope	Met	Not met	Not applicable
7. Choose and install correct collimator	Met	Not met	Not applicable
8. Set acquisition parameters correctly	Met	Not met	Not applicable
9. Choose the correct computer protocol	Met	Not met	Not applicable
10. Choose correct patient data	Met	Not met	Not applicable
11. Choose area to be corrected	Met	Not met	Not applicable
12. Apply appropriate filters	Met	Not met	Not applicable
13. Enter patient information	Met	Not met	Not applicable
14. Choose display	Met	Not met	Not applicable
15. Operate camera efficiently	Met	Not met	Not applicable
16. Label images with appropriate information	Met	Not met	Not applicable
17. Place images on hard copy, if required	Met	Not met	Not applicable
18. Label images with appropriate information	Met	Not met	Not applicable

**\*Failure to perform this task constitutes an automatic failure of this competency.**

Comments:

After observing the student using attenuation correction, I believe that he/she is competent to perform such processing with minimal assistance.

Technologist: \_\_\_\_\_ Date: \_\_\_\_\_

# RADIOPHARMACY

UAB Nuclear Medicine Technology Program

# RADIOPHARMACY CHECKLIST

STUDENT: \_\_\_\_\_ DATE: \_\_\_\_\_

CLINICAL INSTRUCTOR: \_\_\_\_\_

	Performed	Not Performed	N/A	Comments
<b>GENERATOR ELUTION/QC</b>				
1. Elutes generator properly				
2. Assays eluate				
3. Calculates eluate concentration				
4. Performs Al <sup>27</sup> testing				
5. Performs Mo-99 breakthrough test				
6. Calculates radionuclidic purity correctly				
<b>RADIOPHARMACEUTICAL QC</b>				
1. Performs chromatography on radiopharmaceuticals				
2. Calculates radiochemical purity correctly				
<b>UNIT DOSE PREPARATION</b>				
1. Withdraws appropriate volume/activity				
2. Uses proper aseptic technique				
3. Assays dose				
4. Labels dose correctly				
<b>RADIATION PROTECTION</b>				
1. Wears lab coat and personal monitors				



2. Wears gloves when handling radioactivity				
3. Uses time, distance and shielding effectively				
<b>RECEIPT/HANDLING</b>				
1. Correctly packages radiopharmaceutical for shipment				
2. Checks incoming/outgoing boxes for contamination				
3. Checks exposure levels on outgoing boxes				

	Performed	Not Performed	N/A	Comments
4. Attaches appropriate DOT label on outgoing shipments				
<b>MISCELLANEOUS</b>				
1. Performs daily constancy check on dose calibrator				
2. Other (indicate task)				
3. Other (indicate task)				
4. Other (indicate task)				

Comments:

## Radiopharmacy Clinical Assignment

1. Supply the following information about the Mo-99/Tc-99m generators used in this radiopharmacy.

Manufacturer \_\_\_\_\_

Wet or dry column? \_\_\_\_\_

Size (Mo-99 activity at calibration) \_\_\_\_\_

2. For “dry” column generators, what volume of saline is added to the generator? What size evacuated vials are used to collect the eluate?
3. Is the eluate concentration approximately the same from one elution to the next?
4. How often is a particular generator eluted?
5. Calculate the elution efficiency of one of the generators in use at this facility. Show all your work.
6. For how many days is a generator used?

***Radiopharmacy Clinical Assignment Continued...***

7. What is the expiration time of the Tc-99m eluate?
  
  
  
  
  
  
  
  
  
  
8. Identify the quality control tests performed on the eluate. State the acceptable limits for each test performed.
  
  
  
  
  
  
  
  
  
  
9. What is the DOT Transport Index on the generator shipping container when it is received?
  
  
  
  
  
  
  
  
  
  
10. For how long is a spent generator stored before it is returned to the manufacturer?
  
  
  
  
  
  
  
  
  
  
11. Describe the packaging process used to return a spent generator to the manufacturer.
  
  
  
  
  
  
  
  
  
  
12. What is the Transport Index on the spent generator shipping container when it is returned to the manufacturer? How is the Transport Index determined?



# CHILDREN'S HOSPITAL

**UAB Nuclear Medicine Technology Program**

# CHILDREN'S HOSPITAL CHECKLIST

Student: \_\_\_\_\_

Date: \_\_\_\_\_

Clinical Instructor: \_\_\_\_\_

Procedure	Performed /Observed	Not Performed /Seen	N/A	Comments
Hepatobiliary				
3-Phase bone imaging				
Bone imaging				
*VCUG				
MUGA				
*Gastric emptying				
Infection imaging				
Renal – MAG 3				
Renal – DMSA				
V/Q				
Thyroid imaging				
Camera QC – Uniformity/linearity				
Camera QC - COR				

\*Should definitely see at Children's Hospital

**On the back of this checklist, write a short comparison of Adult vs Pediatric Nuclear Medicine**

Clinical Instructor comments:



# PET IMAGING



## Competency Evaluation

# PET/CT

STUDENT: \_\_\_\_\_

DATE: \_\_\_\_\_

Before this evaluation is attempted, the student must have completed independently at least 5 PET/CT studies under the supervision of a technologist. The technologist evaluating the student should circle the performance level for each item.

### PATIENT CARE:

1. * Verify patient identification and written orders for study	Met	Not met	Not applicable
2. Communicate with patient (including procedure explanation)	Met	Not met	Not applicable
3. Obtain appropriate history	Met	Not met	Not applicable
4. Perform aseptic IV injection	Met	Not met	Not applicable
5. Provide appropriate patient care	Met	Not met	Not applicable
6. Assist in patient transfer	Met	Not met	Not applicable
7. Provide safe and dignified Environment	Met	Not met	Not applicable
8. Discharge the patient	Met	Not met	Not applicable

### PET/CT INSTRUMENTATION:

9. Calibrate camera for radionuclide	Met	Not met	Not applicable
10. Choose and install correct collimator	Met	Not met	Not applicable
11. Set acquisition parameters correctly	Met	Not met	Not applicable
12. Enter patient information	Met	Not met	Not applicable
13. Operate camera efficiently	Met	Not met	Not applicable

### PERFORM PET/CT IMAGING:

14. Remove attenuating objects	Met	Not met	Not applicable
15. Position patient correctly	Met	Not met	Not applicable
16. Compensate for positioning problems	Met	Not met	Not applicable
17. Place patient table at appropriate height and starting location	Met	Not met	Not applicable
18. Perform image efficiently	Met	Not met	Not applicable

**COMPLETE THE PET/CT IMAGE:**

19. Record study	Met	Not met	Not applicable
20. Process study	Met	Not met	Not applicable
21. Label study correctly	Met	Not met	Not applicable
22. Present study to supervisor	Met	Not met	Not applicable
23. Prepare room for next patient	Met	Not met	Not applicable

*Competency Evaluation PET/CT Continued...*

**RADIATION / BIOHAZARDS:**

24. Ensure proper time, distance and shielding techniques are used for 511 kev photons	Met	Not met	Not applicable
25. Observe precautions throughout study	Met	Not met	Not applicable

**PROBLEM SOLVING:**

27. Recognize problems & handle each appropriately	Met	Not met	Not applicable
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**\*Failure to perform this task constitutes an automatic failure of this competency.**

Comments:

After observing the student complete this study, I believe that he/she is competent to perform this study with minimal assistance.

Technologist: \_\_\_\_\_

Date: \_\_\_\_\_

## PET/CT IMAGING – STUDENT COMPETENCY CHECKLIST

Student: \_\_\_\_\_

Date: \_\_\_\_\_

Clinical Instructor: \_\_\_\_\_

	Performed	Not Performed	N/A	Comments
<b><u>Daily Start-up</u></b>				
Check daily QC numbers & evaluate sinogram				
Check dose calibrator constancy				
Draw saline & prep for patient injections				
Stock injection areas				
<b><u>Patient Prep</u></b>				
Evaluate patient chart for appropriateness				
Code patient chart for proper insurance				
Explain procedure to patient				
Assay dose for appropriate injection				
<b><u>Camera Setup</u></b>				
Input patient data				
Input appropriate scan data				
Setup patient for WB scan				
Setup patient for Brain scan				
Setup scan immobilization device				
Start scan				
Evaluate scan				
Archive patient data				
<b><u>End of Day</u></b>				
Survey & wipes				
Stock rooms				

Comments:

Student Signature: \_\_\_\_\_

Date: \_\_\_\_\_

PET/CT Technologist Signature: \_\_\_\_\_

Date: \_\_\_\_\_

## COMPUTED TOMOGRAPHY CLINICAL HOURS DOCUMENTATION

Hours can be obtained in PET/CT, SPECT/CT, and/or CT

Name (print): \_\_\_\_\_

Equipment: \_\_\_\_\_

Location: \_\_\_\_\_

Name of person confirming clinical hours: \_\_\_\_\_

(Claims of clinical hours can be confirmed with the Program Director, Technical Supervisor, or Supervising Physician. Please print the name of the person confirming the hours above along with credentials.)

Date	Total Hours	Signature of Person confirming hours


I, \_\_\_\_\_, have completed a total of \_\_\_\_\_ hours as confirmed above.

\_\_\_\_\_

*Signature*

# SUMMARY EVALUATION

(A summary evaluation must be completed for every clinic site attended.)

## UAB Nuclear Medicine Technology Program

# SUMMARY EVALUATION

**STUDENT:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

Directions: The following categories describe specific behaviors. To the right of each are 4 or 5 descriptors. Please read each carefully and then place an "X" in the box with the descriptor that best applies to the student.

Technical Knowledge	Lacks knowledge of fundamental principles	Limited: Needs help with techniques frequently	Superior: Can answer almost any question; performs independently	Fair: Occasionally needs help	Good: Rarely needs help
Quality of Work	Extremely accurate with rare exceptions	Usually accurate	Often needs major correction	Most work inaccurate; needs constant correction	Consistently accurate; little help needed
Initiative	Conscientious, requiring some follow-up	Neglects work or wanders; needs frequent reminders	Extremely thorough with all assignments	Stays with job; needing occasional reminders	Avoids work and often leaves with work undone
Efficiency of Work	Often impedes patient flow	Facilitates patient flow	Steady pace; patient flow is smooth	Occasionally impedes patient flow	Usually impedes patient flow
Work Attitude	Enthusiastic; Considerate and helpful; follows instruction carefully and accurately	Complains occasionally; relates well to others; usually follows instructions	Resents authority; complains about work; does not follow instructions	Complains often; not a good team member; argumentative	Accepts assignments willingly asks when instruction is needed
Judgment	Good judgment; asks when in doubt	Almost always exercises good judgment independently	Frequently makes faulty judgment	Lacks basics of common sense	Occasionally makes faulty judgment
Personal Appearance	Always unkempt and untidy; poor personal hygiene	Neat and clean; good personal hygiene	Occasionally unkempt and untidy; poor personal hygiene		Exemplary; very professional
Patient Attitude	Treats patient indifferently and is rude	Occasionally rude		Is polite and shows some empathy	Always polite and shows utmost concern and empathy
Use and Care of Equipment	Often misuses equipment and facilities	Is careful with equipment and facilities	Sometimes misuses equipment and facilities	Is careful; interested in maintaining equipment	Careless and wasteful
Communication	Low; relevant information not transmitted	Inappropriate; voice abrupt and not applicable	Average; transmits pertinent info when prompted	Above Average; transmits pertinent info without prompt	Superior; relays info appropriately and accurately



Punctuality	Consistently on time	Occasionally tardy	Frequently tardy		
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Comments:

On \_\_\_\_\_ (date), a conference regarding the contents of this evaluation was held.

Student: \_\_\_\_\_ Clinical Instructor: \_\_\_\_\_

# CASE STUDIES

# CASE STUDY FORM

Name: \_\_\_\_\_ Study: \_\_\_\_\_

## A. PATIENT DATA

Clinical indication for study:

Relevant medical history:

## B. DOSE PREPARATION

1. Radiopharmaceutical: \_\_\_\_\_

a. Activity administered: \_\_\_\_\_

b. Volume administered: \_\_\_\_\_

2. Dose recorded in logbook? Yes \_\_\_\_\_ No \_\_\_\_\_

3. Dose checked in dose calibrator before administration? Yes \_\_\_\_\_ No \_\_\_\_\_

Does it match prescribed dose within limits? Yes \_\_\_\_\_ No \_\_\_\_\_

4. What type of radiation protection was practiced during dose preparation?

**C. DOSE ADMINISTRATION**

- 1. Patient's ID checked before administration? Yes \_\_\_\_\_ No \_\_\_\_\_
- 2. Dose administered by what route? \_\_\_\_\_
- 3. Syringe shield used? Yes \_\_\_\_\_ No \_\_\_\_\_

**Case Study Form continued...**

- 4. Aseptic technique used? Yes \_\_\_\_\_ No \_\_\_\_\_

Describe the technique

- 5. Patient observed for reaction to radiopharmaceutical? Yes \_\_\_\_\_ No \_\_\_\_\_

**D. PATIENT HANDLING**

- 1. How was patient transported to department?
- 2. How was transfer to imaging table performed?
- 3. List any patient preparation required for this study.

- 4. Who explained procedure to patient?

What information was conveyed to the patient?

What questions did patient ask?

- 5. Special instruction / precautions Yes \_\_\_\_\_ No \_\_\_\_\_

IV \_\_\_\_\_  
Oxygen \_\_\_\_\_  
Catheter \_\_\_\_\_

Isolation technique \_\_\_\_\_  
Other (describe) \_\_\_\_\_

**E. INSTRUMENTATION**

1. Name of instrument \_\_\_\_\_

*Case Study Form continued...*

2. What quality control was performed on this instrument on the day of this test?

3. Collimator \_\_\_\_\_

4. Acquisition parameters \_\_\_\_\_

**F. EXAMINATION PROCEDURE**

1. Study performed how long following radiopharmaceutical administration?

2. What routine views were acquired?

3. What special views were required?

4. What alternatives were offered if the patient was unable to cooperate?



# SELF-ASSESSMENT

(One self-assessment should be completed at the end of the semester.)





***Self-Assessment continued...***

3. What might help you achieve competency (independent performance) in the areas identified in #2?

4. What skills do you still lack overall? (That is, you felt uncomfortable not being able to perform this task during the clinical term, or it may have hindered your other work in some way.)

# CT CLINIC DOCUMENTS

# COMPUTED TOMOGRAPHY CLINICAL EDUCATION BEHAVIOR EVALUATION FORM

Student Name: \_\_\_\_\_ Date: \_\_\_\_\_

Name of Clinical Education Center: \_\_\_\_\_

Using the following scale, circle the number which best describes the performance of the student in each of the areas identified:

- 3 Outstanding  
consistently performs in a superior manner, needs no improvement
- 2 Above Average  
performs well, requires minimal improvement
- 1 Average  
basically acceptable with necessary improvement
- 0 Inadequate  
needs major improvement

1. <b>Application of Technical Knowledge:</b> understands and applies knowledge of procedure	3	2	1	0	NA
2. <b>Attitude towards patients:</b> always polite and empathetic; demonstrates good disposition	3	2	1	0	NA
3. <b>Attitude towards work:</b> enthusiastic; considerate; helpful; follows instructions	3	2	1	0	NA

4.	<b>Communication Skill:</b> transmits pertinent information to patients and staff in a professional and cheerful manner	3	2	1	0	NA
5.	<b>Confidence:</b> is sure of ability to adequately perform procedures and interact with patients	3	2	1	0	NA
6.	<b>Compassion:</b> assists patients willingly with indifference towards ethnicity, socioeconomic status, disease process, etc.	3	2	1	0	NA
7.	<b>Efficiency of Work:</b> completes tasks in a timely manner; does not impede patient flow	3	2	1	0	NA
8.	<b>Initiative and Motivation:</b> performs voluntarily; thorough with all assignments; exhibits desire to learn	3	2	1	0	NA
9.	<b>Judgment:</b> exhibits good judgment, asks when in doubt	3	2	1	0	NA
10.	<b>Personal Appearance:</b> exemplary, very professional with good personal hygiene	3	2	1	0	NA
11.	<b>Quality of Work:</b> accurate, most work completed at expected level or higher	3	2	1	0	NA
12.	<b>Reaction to Criticism:</b> readily accepts constructive criticism and adapts behavior to reflect improvement	3	2	1	0	NA
13.	<b>Tact and Diplomacy:</b> exercises discretion in dealing with sensitive issues regarding patients; is courteous to patients, staff and visitors	3	2	1	0	NA
14.	<b>Technical Knowledge:</b> performs procedures accurately and efficiently; knows when adjustments are necessary and responds accordingly	3	2	1	0	NA

**COMMENTS: Please list relevant comments including the areas(s) in which the student is above average and those which require improvement**

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**TOTAL POINTS RECEIVED BY STUDENT:** \_\_\_\_\_

**TOTAL SCORE ON 100% SCALE:** \_\_\_\_\_

**LETTER GRADE PER SCORE:** \_\_\_\_\_

Student Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Technologist's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Signature of Clinical Preceptor: \_\_\_\_\_ Date: \_\_\_\_\_

Signature of Clinical Coordinator (faculty): \_\_\_\_\_ Date: \_\_\_\_\_

# ATTENDANCE SHEET

Date	Time		Comments and Initials of Supervisor
	In	Out	




**Please fill this form out completely**

Department of Clinical and Diagnostic Sciences

Nuclear medicine Technology

# COMPUTED TOMOGRAPHY OPTION CLINICAL SCHEDULE FORM

Clinical Education Center \_\_\_\_\_

Advanced Imaging Modalities Computed Tomography:

Contact Person \_\_\_\_\_

<b>Week Of</b>	<b>Monday</b>	<b>Tuesday</b>	<b>Wednesday</b>	<b>Thursday</b>	<b>Friday</b>
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Schedule must be arranged and agreed upon by student and area clinical supervisors. All changes must be pre-approved with clinical supervisor.

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Student Signature

Date

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Computed Topographer Clinical Supervisor Signature

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Date

# COMPUTED TOMOGRAPHY (CT) CLINICAL COMPETENCY EVALUATION FORM

Student Name: \_\_\_\_\_ Date: \_\_\_\_\_

Type of Procedure: \_\_\_\_\_ Evaluator's Signature: \_\_\_\_\_

**Using the following scale, circle the number which best describes the performance of the student in each of the areas identified:**

- 3 Above Average Knowledge and Performance
- 2 Average Knowledge and Performance
- 1 Below Average Knowledge and Performance
- 0 Unacceptable Level of Knowledge and Performance
- N/A Not Applicable

## Section I: Patient Care

1. Prepares examination room for patient	3	2	1	0	NA
2. Properly identifies the patient	3	2	1	0	NA
3. Introduces themselves to the patient	3	2	1	0	NA
4. Educates patient on general aspects of CT and procedure specifics; including obtaining pertinent information concerning allergies, if contrast media is to be administered.	3	2	1	0	NA
5. Screens patient's medical record for information necessary for the performance of the procedure, e.g., consent form, lab values, etc., documents and reports findings	3	2	1	0	NA

6.	Obtains and records patient history procedure information	3	2	1	0	NA
7.	Transports patient to the examination room	3	2	1	0	NA
8.	Transfers patient to CT couch	3	2	1	0	NA
9.	Answers patient questions and addresses concerns	3	2	1	0	NA

- 3 Above Average Knowledge and Performance
- 2 Average Knowledge and Performance
- 1 Below Average Knowledge and Performance
- 0 Unacceptable Level of Knowledge and Performance
- N/A Not Applicable

**Section II: Procedure Performance**

1.	Evaluates procedure request form	3	2	1	0	NA
2.	Properly prepares examination room	3	2	1	0	NA
3.	Prepares contrast media, if necessary; including identification of type, dosage, administration route, loads syringes, mixes oral, etc.	3	2	1	0	NA
4.	Loads power injector, if required	3	2	1	0	NA
5.	Properly administers contrast media, if allowed	3	2	1	0	NA
6.	Identifies contrast media reactions and responds accordingly	3	2	1	0	NA
7.	Transfers patient to CT couch	3	2	1	0	NA
8.	Properly centers patient for procedure	3	2	1	0	NA
9.	Enters the proper patient identification information into the CT computer	3	2	1	0	NA
10.	Identifies and uses proper protocol for procedure	3	2	1	0	NA
11.	Selects and uses proper equipment controls to obtain the best technical image, e.g., window width, window level, fields-of-view, matrix size, algorithm, etc.	3	2	1	0	NA
12.	Performs procedure properly (proper patient instructions, etc.)	3	2	1	0	NA
13.	Identifies pathology in relation to normal anatomy	3	2	1	0	NA
14.	Demonstrates knowledge of necessary adjustments to be made if pathology is discovered	3	2	1	0	NA
15.	When required, demonstrates knowledge of aseptic/sterile technique	3	2	1	0	NA

16.	Correctly applies radiation protection devices to the patient and other who must remain in the radiographic room	3	2	1	0	NA
17.	Follows correct filing format for procedure	3	2	1	0	NA
18.	Properly archives images and records pertinent information on the medical record	3	2	1	0	NA
19.	Dismisses the patient with proper post procedure instructions	3	2	1	0	NA

**SCORE:** \_\_\_\_\_



# CT DAILY LOG OF EXPERIENCES

Name of Student		Institution/Division	Clinical Preceptor
Date	Case #	Procedure	Comments
1.			<hr/> <hr/> <hr/>
2.			<hr/> <hr/> <hr/>
3.			<hr/> <hr/> <hr/>
4.			<hr/> <hr/> <hr/>
5.			<hr/> <hr/> <hr/>

6.			<hr/> <hr/> <hr/>
7.			<hr/> <hr/> <hr/>

**PLEASE FILL THIS FORM OUT COMPLETELY**

Duplicate as Needed

# MR CLINIC DOCUMENTS

# ENTRY LEVEL AND LEVEL 1 PERFORMANCE OBJECTIVES

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Evaluator: \_\_\_\_\_

By the end of the rotation, the student will be able to:

- \_\_ 1. Explain how to call for a fire and the special considerations in the MRI department.
- \_\_ 2. Explain how to call for a code and the special considerations in the MRI department.
- \_\_ 3. Locate randomly selected supplies from the inventory
- \_\_ 4. Demonstrate knowledge of the location and proper use of the patient help device.
- \_\_ 5. Prepare the oxygen system for use.
- \_\_ 6. Prepare the suction system for use.
- \_\_ 7. Name common examinations and describe the procedure briefly.
- \_\_ 8. State how to determine what examinations need to be done (schedules or requisitions).
- \_\_ 9. Demonstrate how to operate the imager.
  - \_\_ a. Loading unexposed film and removing exposed film
  - \_\_ b. Format changes
- \_\_ 10. Demonstrate how to adjust window for imaging.
  - \_\_ a. Width
  - \_\_ b. Level
- \_\_ 11. Demonstrate how to view images.
- \_\_ 12. Demonstrate imaging for specific exams
- \_\_ 13. Demonstrate how to enter patient data.
- \_\_ 14. Demonstrate how to annotate data.

- \_\_ 15. State knowledge of fringe field and magnetic field safety requirements.
- \_\_ 16. Perform the following with assistance:
  - \_\_ a. Prepare a room and equipment for the examination.
  - \_\_ b. Explain to the patient the nature of the examination and obtain a history.
  - \_\_ c. Record any pertinent data from the patient relative to the requested examination.
  - \_\_ d. Verify appropriate screening of patient to assure safety and eliminate metals from entering the exam room
  - \_\_ e. Bring patient into the exam room and ensure patient comfort.
  - \_\_ f. Assist the technologist in obtaining and processing images.
- \_\_ 17. Identify on MRI images the following structures:
  - \_\_ a. Patient identification
  - \_\_ b. Image numbering and sequencing
  - \_\_ c. Pertinent technical information (i.e. T1 vs. T2 vs. PD weighting)
- \_\_ 18. Demonstrate how to organize paperwork:
  - \_\_ a. Schedules
  - \_\_ b. Requisition and billing completed

***Entry Level and Level1 Performance Objectives continued...***

- \_\_ c. Films/film check-out
- \_\_ 19. Observe venipuncture and administration of contrast media.
- \_\_ 20. Demonstrate correct venipuncture technique and contrast administration.
  - \_\_ a. Complete venipuncture competency examination.

## NMT 695 MRI CLINICAL PRACTICE

# LEVEL 2 PERFORMANCE OBJECTIVES

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Evaluator: \_\_\_\_\_

By the end of the rotation, the student will be able to:

- 1. Be responsible for the continued demonstration of all previous objectives.
- 2. Demonstrate use of control of table position, etc., on MR Scanner.
- 3. Demonstrate daily quality assurance and evaluation of quality assurance tests.
- 4. Select appropriate coil for exam.
- 5. Demonstrate how to change coils on the MR unit scanner.
- 6. Demonstrate how to select the appropriate protocol.
- 7. Determine imaging region.
- 8. Describe operation of viewing console.
- 9. Explain tuning (as required).
- 10. Explain how various emergency situations would be conducted in the exam room.
  - a. Quench
  - b. Cryogen leak
  - c. Metallic object against magnet
  - d. Medical emergency
- 11. Demonstrate how to adjust imaging parameters to obtain an optimum image to include:
  - a. Field of view
  - b. Number of slices
  - c. Slice thickness
  - d. Number of excitations (acquisitions)
  - e. Repetition time

- \_\_ f. Echo time
  - \_\_ g. Phase encoding direction
  - \_\_ h. Frequency encoding direction
  - \_\_ i. Matrix size
  - \_\_ j. Slice gap between slices
- \_\_ 12. Explain the following terms:
- \_\_ a. Center, Carrier or System frequency
  - \_\_ b. RF plus amplitude
  - \_\_ c. RF Pulse Length
  - \_\_ d. Receive attenuation



## NMT 695 MRI CLINICAL PRACTICE

# LEVEL 3 PERFORMANCE OBJECTIVES

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Evaluator: \_\_\_\_\_

By the end of the rotation, the student will be able to:

- \_\_ 1. Be responsible for the continued demonstration of all previous objectives.
- \_\_ 2. Explain when the following imaging parameters should be adjusted to obtain an optimum image.
  - \_\_ a. Field of view
  - \_\_ b. Number of slices
  - \_\_ c. Slice thickness
  - \_\_ d. Number of excitations (acquisitions)
  - \_\_ e. Repetition time
  - \_\_ f. Echo time
  - \_\_ g. Phase encoding direction
  - \_\_ h. Frequency encoding direction
  - \_\_ i. Matrix size
  - \_\_ j. Slice gap between slices
- \_\_ 3. Demonstrate how to do manual and auto tuning (as required).
- \_\_ 4. For the following exams, state the phase and frequency direction and an explanation of why those directions are chosen:
  - \_\_ a. Axial spine
  - \_\_ b. Sagittal head
  - \_\_ c. Coronal sella
  - \_\_ d. Coronal spine
- \_\_ 5. Demonstrate ability to select appropriate imaging parameters to reduce:

- \_\_ a. Flow artifact
  - \_\_ b. Motion artifacts
  - \_\_ c. Aliasing (wrap-around) artifacts
- \_\_ 6. Explain the common protocols of the MR scanner.
- \_\_ 7. Explain the difference between gradient-echo and spin-echo techniques.
- \_\_ 8. Describe imaging utilizing the following options:
  - \_\_ a. Fat suppression
  - \_\_ b. Field-echo/gradient echo
  - \_\_ c. Flow comp/gradient moment nulling/gradient motion rephrasing
  - \_\_ d. Presaturation
- \_\_ 9. Demonstrate ability to correctly perform MR examinations of the central nervous system:
  - \_\_ a. Brain
  - \_\_ b. C-spine/T-spine/L-spine

***Level 3 Performance Objectives continued...***

- \_\_ 10. Demonstrate ability to correctly perform MR examinations of the:
  - \_\_ a. IAC/trigeminal nerve
  - \_\_ b. Sella Turcica

## LEVEL 4 PERFORMANCE OBJECTIVES

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Evaluator: \_\_\_\_\_

By the end of the rotation, the student will be able to:

- \_\_\_ 1. Be responsible for the continued demonstration of all previous objectives.
- \_\_\_ 2. Perform adjustments of protocols (on procedures whereby the competency exam has been passed) to obtain an optimum image under indirect supervision.
  - \_\_\_ a. Field of view
  - \_\_\_ b. Number of slices
  - \_\_\_ c. Slice thickness
  - \_\_\_ d. Number of excitations (acquisitions)
  - \_\_\_ e. Repetition time
  - \_\_\_ f. Echo time
  - \_\_\_ g. Phase encoding direction
  - \_\_\_ h. Frequency encoding direction
  - \_\_\_ i. Matrix size
  - \_\_\_ j. Slice gap between slices
  - \_\_\_ k. Resolution (pixel size), if applicable
- \_\_\_ 3. Demonstrate continued ability to correctly perform MR examinations of the central nervous system under indirect supervision:
  - \_\_\_ a. Brain
  - \_\_\_ b. C-spine/T-spine/L-spine
- \_\_\_ 4. Under direct supervision demonstrate ability to correctly perform MR examinations of the:
  - \_\_\_ a. Musculoskeletal region
  - \_\_\_ b. Abdomen/Pelvis

\_\_ c. Thorax/Mediastinum

# ATTENDANCE SHEET

Date	Time		Comments and Initials of Supervisor
	In	Out	



**Please fill this form out completely**

Department of Clinical and Diagnostic Sciences

Nuclear Medicine Technology

# MAGNETIC RESONANCE IMAGING OPTION CLINICAL SCHEDULE FORM

Clinical Education Center \_\_\_\_\_

Advanced Imaging Modalities Magnetic Resonance Imaging:

Contact Person \_\_\_\_\_

Week Of	Monday	Tuesday	Wednesday	Thursday	Friday
---------	--------	---------	-----------	----------	--------




Schedule must be arranged and agreed upon by student and area clinical supervisors. All changes must be pre-approved with clinical supervisor.

---

---

Student Signature

Date

---

Magnetic Resonance Clinical Supervisor Signature

---

Date

# MAGNETIC RESONANCE (MRI) CLINICAL COMPETENCY EVALUATION FORM

Student Name: \_\_\_\_\_ Date: \_\_\_\_\_

Type of Procedure: \_\_\_\_\_ Evaluator's Signature: \_\_\_\_\_

**Using the following scale, circle the number which best describes the performance of the student in each of the areas identified:**

- 3 Above Average Knowledge and Performance
- 2 Average Knowledge and Performance
- 1 Below Average Knowledge and Performance
- 0 Unacceptable Level of Knowledge and Performance
- N/A Not Applicable

## Section I: Patient Care

1. Prepares examination room for patient	3	2	1	0	NA
2. Properly identifies the patient	3	2	1	0	NA
3. Introduces themselves to the patient	3	2	1	0	NA
4. Educated patient on general aspects of MRI and procedure specifics; including obtaining pertinent information concerning allergies, if contrast media is to be administered.	3	2	1	0	NA
5. Screens patient's medical record for information necessary for the performance of the procedure, e.g., consent form, lab values, etc., documents and reports findings	3	2	1	0	NA

6.	Obtains and records patient history procedure information	3	2	1	0	NA
7.	Transports patient to the examination room	3	2	1	0	NA
8.	Transfers patient to MRI couch	3	2	1	0	NA
9.	Answers patient questions and addresses concerns	3	2	1	0	NA

- 3 Above Average Knowledge and Performance
- 2 Average Knowledge and Performance
- 1 Below Average Knowledge and Performance
- 0 Unacceptable Level of Knowledge and Performance
- N/A Not Applicable

**Section II: Procedure Performance**

1.	Evaluates procedure request form	3	2	1	0	NA
2.	Properly prepares examination room	3	2	1	0	NA
3.	Prepares contrast media, if necessary; including identification of type, dosage, administration route, loads syringes, mixes oral, etc.	3	2	1	0	NA
4.	Loads power injector, if required	3	2	1	0	NA
5.	Properly administers contrast media, if allowed	3	2	1	0	NA
6.	Identifies contrast media reactions and responds accordingly	3	2	1	0	NA
7.	Transfers patient to MRI couch	3	2	1	0	NA
8.	Properly centers patient for procedure	3	2	1	0	NA
9.	Enters the proper patient identification information into the MRI computer	3	2	1	0	NA
10.	Identifies and uses proper protocol for procedure	3	2	1	0	NA
11.	Selects and uses proper equipment controls to obtain the best technical image, e.g., window width, window level, fields-of-view, matrix size, algorithm, etc.	3	2	1	0	NA
12.	Performs procedure properly (proper patient instructions, etc.)	3	2	1	0	NA
13.	Identifies pathology in relation to normal anatomy	3	2	1	0	NA
14.	Demonstrates knowledge of necessary adjustments to be made if pathology is discovered	3	2	1	0	NA
15.	When required, demonstrates knowledge of aseptic/sterile technique	3	2	1	0	NA

16.	Follows correct filing format for procedure	3	2	1	0	NA
17.	Properly archives images and records pertinent information on the medical record	3	2	1	0	NA
18.	Dismisses the patient with proper post procedure instructions	3	2	1	0	NA

**SCORE:** \_\_\_\_\_

# MRI DAILY LOG OF EXPERIENCES

Name of Student		Institution/Division	Clinical Preceptor
Date	Case #	Procedure	Comments
1.			<hr/> <hr/> <hr/> 
			<hr/> <hr/> <hr/> 
			<hr/> <hr/> <hr/> 
			<hr/> <hr/> <hr/> 
			<hr/> <hr/> <hr/> 
			<hr/> <hr/> <hr/> 
			<hr/> <hr/> <hr/> 

			<hr/> <hr/> <hr/>
			<hr/> <hr/> <hr/>

**PLEASE FILL THIS FORM OUT COMPLETELY**

Duplicate as Needed



# APPENDICES

The University of Alabama at Birmingham  
School of Health Professions  
**NUCLEAR MEDICINE TECHNOLOGY PROGRAM**

## **APPENDIX A: STUDENT WORK POLICY**

(November 2002)

All students are covered by professional liability insurance when they are enrolled and participate in the clinical education courses of the NMT Program. Students who become employees in a clinical area and whose work takes place outside of the NMT curriculum are not covered by student liability insurance.

For work that requires monitoring of radiation exposure, unless the student is a UAB employee, students must wear dosimeters provided by their employers. Students must wear personnel dosimeters provided by UAB only when they are functioning as a UAB NMT student in an assigned clinical facility or when they are working as a UAB employee in an area where occupational radiation exposure is monitored.

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## **APPENDIX B:**

### **UAB HIGHLANDS**

# **APPEARANCE, UNIFORM AND HYGIENE**

**Purpose:**

Our personal appearance creates an impression on patients and visitors. The impression you create reflects the standards of UAB Highlands and the pride you have on your job. It is essential that we project professionalism, cleanliness, friendliness and safety awareness. Our efforts of creating a pristine experience for you patients and visitors begin with maintaining a positive personal appearance.

**POLICY:**

- I. **Appearance – Uniformed Personnel** (includes all clinical employees and all others who wear a specific form of apparel in connection with their job.)

- A. Uniforms must be neat and clean at all times.
- B. Employees must wear their name badge at all times to identify themselves to patients, visitors and fellow employees.
- C. The wearing of jewelry and/or accessories should complement the uniform in a conservative way and may not clash with the overall appearance of the uniform. In some departments, jewelry and accessories may not be worn due to the nature of the work performed.
  - 1. Employees may not wear large, and/or brightly colored accessories.
  - 2. Examples of what may be worn include: One set of small earrings (for reference purposes, earrings must fit within the dimensions of your picture on the back of your name badge); one or two small hair accessories (for reference purposes hair accessories may not be longer than the length of your name badge).
- D. The number of accessory items worn must be minimal so the accessories do not detract from employees' neat and professional appearance.
  - 1. An employee may wear no more than:
    - a. One set of earrings (as described in C.2 above)
    - b. A total of two rings on both hands (engagement ring and wedding band may be counted as one)
    - c. One wristwatch

**Appendix B Continued...**

- d. One necklace
      - e. Two hair accessories (as described in C.2 above)
    - 2. Employees may not wear body piercing accessories that can be seen, with the exception of earrings noted above.
  - E. Shoes must protect employees' feet appropriately and must meet requirements within employees' work units.
    - 1. No canvas shoes, clogs, sandals, open-heeled or open-toed shoes.
  - F. Shirts or blouses worn as part of a uniform must be solid in color with no prints or designs (or as stipulated in your department's approved policy).
  - G. Employees may not wear shorts, "skorts", or culottes.
  - H. Uniforms must fit appropriately with not tight uniforms worn and fabric must be thick enough so the under clothes do not show through.
  - I. Employee may not wear blue jeans, "leggings", stirrup-pants or sweat pants.
- II. **Appearance – Non-Uniformed Personnel**
  - A. Employees should dress in a professional manner wearing accepted business attire and accessories.
    - 1. Employee may not wear blue jeans, "leggings", stirrup-pants or sweat pants.
    - 2. Employees may not wear shorts, "skorts", or culottes.
  - B. Employees must wear their name badge at all times to identify themselves to patients, visitors, and fellow employees.
  - C. Shoes must protect employees' feet appropriately and must meet requirements within employees' work units.
    - 1. No canvas shoes, clogs, sandals, open-heeled or open-toed shoes.
- III. **Personal Grooming and Hygiene**
  - A. Employees must appear well-groomed and clean with neat and clean hair, fingernails, teeth, and make-up (if employee chooses to wear make-up).
  - B. Hair styles must be neat and professional and may not be extreme in nature.
  - C. Fingernails must be moderate in length. No nail polish with glitter or artificial nail may be worn.

**Appendix B Continued...**

- D. If make-up is worn, it must not be too bright or too thick.
- E. Perfume or cologne, if worn, may only be light in fragrance. It may only be worn if it does not disturb patients, visitors or your fellow employees.

**IV. Pins, Insignia and Buttons**

- A. Pins, insignia and buttons that are inappropriate in a hospital setting or otherwise detract from professional appearance are prohibited.

**V. Responsibility Compliance**

- A. It is each employee's responsibility to comply with this policy and other practices that may exist in a particular work area.
- B. It is each supervisor's responsibility to ensure employees within their unit comply with this policy and others that may exist in a particular work area.
  - 1. At management's discretion, an employee not in compliance with this policy will not be permitted to work until the matter is corrected.
  - 2. An incident of absence will be recorded if an employee is sent home due to non-compliance before the end of his/her shift
- C. Each department manager and division director has the responsibility of maintaining dress code policies within his/her department/division that are consistent with accepted health care practices of uniforms, appearance and safety.
  - 1. All department-specific practices/policies/guidelines must be on file with Human Resources.
  - 2. Management personnel must ensure all affected employees are knowledgeable about the department-specific practices through new employee orientation, in-services, etc.
- D. Employees who are chronically non-compliant with this policy are subject to progressive discipline, up to and including termination of employment.
  - 1. Management personnel must counsel employees who are non-compliant and administer disciplinary action.
- E. Employees may use UAB Highland's Conflict Resolution procedure for questions concerning interpretation and compliance.

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# APPENDIX C: UNIVERSITY OF ALABAMA HOSPITAL DRESS CODE STANDARD

## UNIVERSITY OF ALABAMA HOSPITAL DRESS CODE STANDARD

Title of Management Policy: <u>Dress Code Standard</u>			
JCAHO Reference:			
Initiated:	<u>Dress Code Project Team</u>	Initiated:	
Endorsed:	Author: _____ Date: _____	Endorsed:	Author: _____ Date: _____
	<u>Patient Relations Steering Committee</u>		<u>Committee/Manager</u>
	Committee/Manager: _____ Date: _____		Committee/Manager: _____ Date: _____
Approved: (originally)	_____ Date: _____	Approved: (originally)	_____ Date: _____
Approved: (Present Edition)	<u>Kevin E. [Signature]</u> <u>9/25/96</u> Hospital Executive Director Date	Approved: (Present Edition)	<u>[Signature]</u> <u>9/25/96</u> Chief, Medical Staff Date

1. **PURPOSE:**  
 To set forth dress standards that will present a professional image of UAB University Hospital.
  
2. **PHILOSOPHY:**  
 It is our belief that the dress/appearance of staff promotes a positive, professional image that projects a caring atmosphere to our patients/customers. It is the responsibility of each Department director/manager to use discretion in the interpretation of this policy to ensure that these standards are met.
  
3. **POLICY:**
  - 3.1 All employees are expected to maintain the standards of neatness, cleanliness, grooming and dress. The following guidelines represent minimum standards.

Department directors/managers may adopt additional dress standards more stringent (but not less stringent) than the requirements indicated below.

- 3.2 Hospital identification badges will be worn at collar/shoulder level while on the Hospital premises for work related purposes. The name and picture will be visible. Clinical areas may alter the location of the identification badge when engaging in an activity that may affect patient safety.
- 3.3 Street clothes/uniforms will be clean, wrinkle free and loose fitting to allow for freedom of movement. No halter tops, sweat pants/shirts, or leggings (that are not part of the department uniform) will be worn. Shirt tails must be tucked into pants.

***Appendix C Continued...***

- 3.4 Clothing with slogans, advertisements, or logos will not be worn (except that employees may wear clothing with slogans, advertisements, or logos promoting Hospital-sponsored events and initiatives that are authorized by Hospital management (department directors/managers)).
- 3.5 Dresses/skirts cannot exceed two inches above the knee in length.
- 3.6 Dress shorts can be worn with a jacket/blazer and cannot exceed two inches above the knee in length.
- 3.7 Hosiery will be worn with dresses, skirts and dress shorts. Patterned, appliquéd or seamed hosiery are not acceptable.
- 3.8 Shoes should be comfortable, appropriate for the work environment and consistent with professional attire.
- 3.9 Sunshades (or other tinted, non-prescription glasses) shall not be worn inside hospital facilities.
- 3.10 Caps or hats are not acceptable unless a part of the uniform.
- 3.11 Under garments will be worn and will not be visible.
- 3.12 Each employee is responsible for his/her daily personal hygiene.
- 3.13 Jewelry will be conservative/no facial jewelry permitted (except on earlobes).



No more than:

3.13.1 Anklets – 1

3.13.2 Rings may be on 2 fingers per hand (not to extend above the knuckle).

3.13.3 Earrings – No more than 2 pairs may be worn. Earrings will be no larger than two inches in diameter or length.

3.13.4 Necklace – 2 necklaces

3.13.5 Bracelet – 1 to each arm

3.13.6 Watch – 1 watch

3.14 Nails will be neat and clean; no longer than one-half inch from the end of finger.

3.15 Hair will be neat and clean.

3.16 A minimum amount of perfume, cologne or other scented products may be worn outside patient care areas.

**Appendix C Continued...**

3.17 Uniforms and other applicable items supplied by the Hospital Department (i.e., keys identification badge, etc.) must be returned to the department when an individual ends employment with the Hospital or transfers to another area within the Hospital.

3.18 Dress standards will be adhered to anytime an employee is on the hospital premises and wearing an identification badge. Requests for exceptions to any of the dress standards based on cultural, religious or medical reasons must be submitted in writing by the employee to the Director, Hospital Human Resources Management for consideration. The employee will receive a written response.

**4. DISCIPLINARY ACTION – Rolling 12-Month Basis:**

Employees who are in violation of this standard may be sent home without pay to change clothes and return immediately to work. The Department director/manager may use their discretion as to whether or not the employee may make up time missed.

The disciplinary process will be activated consistently with University policy:

4.1 Verbal Warning with Education of Hospital and Departmental Policy (if applicable)

4.2 Written Warning with Education of Hospital and Department Policy

4.3 Suspension and Imposed Probation

4.4 Termination

**5. EDUCATION:**

5.1 New employees will be presented a copy of the Hospital Dress Code Standard and the Department Dress Code Standard (if applicable) during orientation.

5.2 Each Department Dress Code Standard will address specific requirements for the area (i.e., uniforms) and take into consideration the safety needs of employees and patients, or other customers (i.e., no sandals or open toed shoes, appropriate cover worn over scrub suits when outside sterile environment, etc.). It will also state locations and under what conditions the garments will be worn (i.e., no surgical shoe covers outside surgical area, etc.).

5.3 Department Dress Code Standards will be approved by the respective Associate Executive Director and a copy will be sent to the Human Resource Management, Department of Relations, Administration Building, extension 4-4458.

5.4 Hospital Dress Code Standard evaluation will occur at least annually.

**6. SCOPE:**

Dress Code Standards applies to all areas of the Hospital.

*Appendix C Continued...*

**7. PERFORMANCE IMPROVEMENT TRACKING RECORD**

Action			Reasons for Development of Standard						Change in Practice	
New Policy	Policy Revision	Policy Review	Required Review	Document Current Practice	Legal/Regulatory Requirement	Quality Risk Safety	New Knowledge	Cost Efficiency	Yes	No
REVISIONS:			This policy is to be reviewed frequently, no less than once every three (3) years, and revised as needed.							
DATE DISTRIBUTED:										
FILE NAME:			It should have the same name as the old dress code standard							

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## **APPENDIX D:**

# **CARDIOVASCULAR ASSOCIATES**

## **DRESS CODE**

### **CARDIOVASCULAR ASSOCIATES, PC DRESS CODE POLICY**

**All designated clinical and non-clinical staff will be required to follow the dress and uniform policy as outlined below.**

1. All CVA staff are expected to wear a uniform approved by CVA unless otherwise noted in policy. (See Uniform Order Form for more details).
2. A white turtleneck or round neck style white shirt may be worn under the uniform top. (Women should not wear men's t-shirts).
3. All uniform tops must be closed (snapped or buttoned) when worn over a white shirt.
4. The uniform top and pant must be the same color and will be worn with either the Heartbeat print jacket or a coordinating solid color jacket.
5. Clinical employees must wear professional, closed-toed shoes at all times. Shoes must be predominantly white, tan, gray, brown or black.
6. Uniform pants must be at least ankle length.
7. Skirts must be of a professional length. Managers have the authority to use their discretion.

8. No jeans/jean type pants (this includes overalls) of any color. No pants fitted to legs may be worn. Pants must be loose fitted.
9. No T-shirts/sweat shirts with logo or advertisement may be worn as an outer garment.
10. For non-clinical employees, no shorts or pants shorter than mid-calf may be worn.
11. No crop shirts or shirts that would reveal any skin between your shirt and pants.
12. No rings or studs in the tongue, eyebrows, nose, etc. (Maximum of 2 earrings per ear)
13. No visible tattoos.
14. Only natural hair colors are acceptable - No blue, pink, purple, etc.
15. Please be considerate of co-workers, patients and guests; good personal hygiene is a must. Perfume, scented lotion and cologne are **not permitted** due to sensitivity (allergies, illness) of employees and patients.

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## APPENDIX E:

# STUDENT EVALUATION OF CLINICAL EXPERIENCE

Hospital: \_\_\_\_\_ Academic Year: \_\_\_\_\_

In an effort to improve the effectiveness of clinical teaching, please respond to the following statements concerning your clinical experience. Use the following rating scale:

Strongly agree	4
Agree	3
Disagree	2
Strongly disagree	1
Unable to comment	0

1. My knowledge and skill (from classroom and/or previous clinical experience) were assessed at the beginning of this clinical experience. 4 3 2 1 0
2. I clearly understood to whom I was directly responsible to at all times. 4 3 2 1 0
3. Throughout the rotation, the clinical instructors attempted to determine how much knowledge and skill I possessed before assigning a particular task. 4 3 2 1 0
4. After the clinical instructors became familiar with my level of proficiency, I was given the opportunity to “try my wings”. 4 3 2 1 0
5. Based on my experience and skill, I would describe the overall degree of supervision I received as:

Too close \_\_\_ Commensurate with need \_\_\_ Not close enough \_\_\_

If not commensurate with need, please comment:

- |    |  |           |
|----|--|-----------|
| 6. | I clearly understood what my assignments were and what was expected of me. | 4 3 2 1 0 |
| 7. | I understood the criteria for acceptable technical performance.            | 4 3 2 1 0 |
| 8. | I understood what was considered acceptable student behavior.              | 4 3 2 1 0 |
| 9. | The clinical instructors established daily learning objective for me.      | 4 3 2 1 0 |

**Appendix E Continued...**

Use the following rating scale:

- |                   |   |
|-------------------|---|
| Strongly agree    | 4 |
| Agree             | 3 |
| Disagree          | 2 |
| Strongly disagree | 1 |
| Unable to comment | 0 |

- |     |   |           |
|-----|---|-----------|
| 10. | My rotation provided experiences that reinforced the knowledge and skill I had when I entered the rotation.                       | 4 3 2 1 0 |
| 11. | The rotation provided new experiences from which I could learn and grow professionally.   | 4 3 2 1 0 |
| 12. | The clinical rotation was a well-rounded experience in which I was able to participate in all aspects of the technologist's role. | 4 3 2 1 0 |
| 13. | There were areas that were over or underemphasized.   | 4 3 2 1 0 |

Identify those areas.

How was this advantageous or disadvantageous to you?

14. I received constructive evaluations and comments about my progress. 4 3 2 1 0
15. I received these often enough to help me correct my weaknesses. 4 3 2 1 0
16. I received feedback about my clinical performance:  
 Daily or whenever appropriate \_\_\_ Midway \_\_\_ Final \_\_\_
17. I feel the following could improve this clinical rotation:

Other comments:

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## APPENDIX F:

# POLICY REGARDING STUDENT PARTICIPATION IN I-131 THERAPY

Any student participating in or observing an Iodine-131 therapy must notify the Clinical Coordinator within 24-hours of participation and must have a thyroid uptake performed 24 – 48 hours following participation/observation.

The uptake must be performed at the clinical site or at the UAB Radiation Safety Office. A copy of the results should be submitted to the Program Director.

## **APPENDIX G:**

# **IDENTITY THEFT PREVENTION POLICY**

(Red Flags)

April 1, 2011

### **I. Introduction**

The University of Alabama at Birmingham (UAB), also referred to herein as "University," has developed this Identity Theft Prevention Policy to facilitate the University's Identity Theft Prevention Program ("Program") pursuant to the Federal Trade Commission's ("FTC") Red Flags Regulation (16 CFR § 681.2), which implements Section 114 of the Fair and Accurate Credit Transactions (FACT) Act of 2003 and the final rules implementing section 315 of the FACT Act. The regulations require each financial institution or creditor to develop and implement a written Identity Theft Prevention Program (Program) to detect, prevent, and mitigate identity theft in connection with the opening of certain accounts and the maintenance of certain existing accounts. For the purpose of these regulations, UAB is considered a creditor and has developed this policy with consideration of the size and complexity of the University's operations, its account systems and the nature and scope of the University's activities.

### **II. Scope and Applicability of Policy**

Managing and protecting data are responsibilities shared by all members of the University community. This policy complements existing "Red Flags" policies of the UAB Health System (UABHS), and other existing University policies related to data security, data protection, and information disclosure. Such policies include, but are not limited to, the UAB Data Protection and Security Policy and the UAB Information Disclosure and Confidentiality Policy. These and other related policies combine to promote UAB's effort to comply with the Health Insurance and Portability and Accountability Act (HIPAA), the Family Educational Rights and Privacy Act (FERPA), Graham Leach Bliley Act (GLBA), Payment Card Industry (PCI) standards, and the Federal Information Security Management Act (FISMA).



This policy applies to Primary Covered Accounts in Appendix (A) and does not apply to accounts covered under the UABHS “Red Flags” policy.

1. Excepting those individuals covered by the existing UABHS “Red Flags” policy, all other individuals, (faculty, staff, students, and visitors), schools, departments, affiliates and/or other similar entities within the University community, including employees of contracted or outsourced non-UAB entities who have access to covered account Personal Identifying Information (PII) are subject to this policy.
2. All customer PII not covered by the UABHS “Red Flags” policy is covered under this policy including, but not limited to, PII data contained in centralized institutional systems, department/unit systems, systems created or operated by third party vendors under the direction of UAB, and PII data stored or maintained in any other capacity or medium where there is a reasonable foreseeable risk of identity theft.

### III. Definitions and Program

#### A. Definitions Used in this Program

1. **Identity Theft** is a fraud committed or attempted using the identifying information of another person without authority.
2. **Red Flag** is a pattern, practice, or specific activity that indicates the possible existence of identity theft.
3. An **Account** is a continuing relationship established by a person with a financial institution or creditor to obtain a product or service for personal, family, household or business purposes. Account includes: (i) An extension of credit, such as the purchase of property or services involving a deferred payment; and (ii) A deposit account.
4. A **Covered Account** is (i) any account the University offers or maintains primarily for personal family or household purposes, that allows multiple payments or transactions, including one or more deferred payments; and (ii) any other account the University identifies as having a reasonable foreseeable risk to customers or the safety and soundness of the University from identity theft. A list of covered accounts under this policy can be found in Appendix A.
5. **Program Administrator** is the individual designated with primary responsibility for oversight of the Identity Theft Policy. See Section VII below.
6. An **Identity Theft Prevention Officer** is someone designated by a department with covered accounts to serve as a liaison to the Program Administrator and is responsible for ensuring that the requirements of the Identity Theft Prevention Policy are incorporated in departmental procedures. This person also may be responsible for ensuring the implementation of other University policies that safeguard and protect data from unauthorized access, use, and disclosure.
7. **Personal Identifying Information (PII)** is any name or number that may be used, alone or in conjunction with any other information, to identify a specific person. Below are examples of data fields that are considered PII:
  1. Taxpayer Identification Number (SSN, ITIN or EIN)

2. System Generated Identification Number (student number or patient number, etc.)
3. Government Passport Number
4. Government Issued Driver's License or Identification Number
5. Name
6. Date of Birth
7. Address
8. Telephone Number(s)
9. Personal Identification Number (PIN)
10. E-mail Address
11. Blazer ID
12. Password
13. Computer Internet Protocol Address
14. Routing Code

## **B. Fulfilling Requirements of the Red Flags Regulations**

Under the red flags regulations, the University is required to establish an "Identity Theft Prevention Program" tailored to its size, complexity and the nature of its operation. **Each University department with covered accounts that maintains, disseminates or disposes of covered account PII data shall designate an individual who will serve as the department's Identity Theft Prevention Officer.**

The Identity Theft Prevention Program must contain reasonable policies and procedures to:

1. **Identify** relevant red flags for new and existing covered accounts and incorporate those red flags into the Program;
2. **Detect** red flags that have been incorporated into the Program;
3. **Prevent** identity theft by responding appropriately to any red flags that are detected;
4. **Mitigate** identity theft once it has occurred; and
5. **Update** the program periodically to reflect changes in risks to the customer and the University from identity theft.

## **IV. Identification of Red Flags**

In order to identify relevant red flags, the University departments should consider the types of accounts that it offers and maintains, methods it provides to open its accounts, methods it provides to access its accounts, and its previous experiences with identity theft. The University has identified the following red flags in each of the categories listed in this section. Additional red flags may be identified by each department and included in the department's procedures to prevent, detect, and mitigate identity theft.

### **A. Notifications and Warnings from a Credit Reporting Agency**

1. A report of fraud accompanying a credit report;

2. A notice or report from a credit agency of a credit freeze on an applicant;
3. A notice or report from a credit agency of an active duty alert for an applicant;
4. Receipt of a notice of address discrepancy in response to a credit report request; and
5. Indication from a credit report of activity that is inconsistent with an applicant's usual pattern of activity.
  1. A recent significant increase in the number of inquiries.
  2. An unusual number of recently established credit relationships.
  3. A material change in the use of credit, especially with respect to recently established credit relationships.
  4. An account that was closed for cause or identified for abuse of account privileges by a financial institution or creditor.

#### **B. Suspicious Documents**

1. An identification document or card that appears to be forged, altered or inauthentic;
2. An identification document or card on which a person's photograph or physical description is not consistent with the person presenting the document;
3. Any other document with information that is not consistent with existing PII maintained by the department or presented by the person opening an account or engaging in an account transaction; and
4. An application for service that appears to have been altered or forged, or gives the appearance of having been destroyed and reassembled.

#### **C. Suspicious Personal Identifying Information (PII)**

1. PII presented that is inconsistent with other information on record that the person has provided (example: inconsistent date of birth, SSN, address or telephone numbers, etc.);
2. Identifying information presented that is the same as information shown on other applications that were found to be fraudulent;
3. Identifying information presented that is consistent with fraudulent activity (such as an invalid phone number or fictitious billing address);
4. A Social Security Number presented that is the same as one given by another person;
5. An address or phone number presented that is the same as that of another person not reasonably expected to be a part of the same household; and
6. Failure to provide complete PII in person, on the phone, or on an application when reminded to do so.

#### **D. Suspicious Covered Account Activity or Unusual Use of Account**

1. Change of address for an account is followed by a request to change the person's name;
2. Payments stop on an otherwise consistently up-to-date account;
3. Account is used in a way that is not consistent with prior use;

4. Mail sent to the person is repeatedly returned as undeliverable;
5. Notice is received by the University that a person is not receiving mail sent by the University;
6. Notice is received by the University that an account has unauthorized activity;
7. A breach is detected in the University's computer system security; and
8. Unauthorized access to or use of a person's account information is detected.

#### **E. Alerts from Others**

1. Notice to the University received from an identity theft victim, law enforcement or other individual that the University has opened or is maintaining a fraudulent account for a person engaged in identity theft.
2. Notice to the University from any organization that an account may be fraudulent.

### **V. Detecting Red Flags**

#### **A. New Covered Accounts**

In order to detect any of the red flags associated with the establishment of a new covered account, University personnel shall take the following steps to obtain and verify the identity of the person opening the account:

1. Require certain identifying information such as name, date of birth, academic records, home address, or other identification or combination thereof. The identifying information may vary by department contingent upon the nature of the services provided and the data maintained in departmental records.
2. Verify the person's identity at the time of issuance of an identification card (review of driver's license, passport, or other government-issued photo identification).
3. Examine documents presented for identification purposes for evidence of falsification or tampering.
4. Validate that the person has met all other University or departmental requirements associated with the opening of a new account.

#### **B. Existing Accounts**

In order to detect any of the red flags identified above for an existing account, University personnel shall take the following steps to monitor transactions on an account:

1. Verify the person's identity at the time of re-issuance of an identification card (review of driver's license, passport, or other government-issued photo identification etc.).

##### ***Appendix G Continued...***

2. Verify the identification of a person who is requesting information in person or by telephone, facsimile, email, or other media.
3. Verify the validity of requests to change PII by mail, email, or other media and provide

the person a reasonable means of promptly reporting incorrect data changes.

4. Notify the individual by e-mail, U. S. mail, telephone, any other means agreed upon by the individual, or by any combination of these methods when PII changes occur and provide the person a reasonable means to promptly report incorrect data changes.
5. Review periodically the list of data fields included in Section III of this policy under the definition of PII and update the list when new data fields are identified that may become relevant to the prevention, detection, and mitigation of identity theft.

### **C. Consumer (“Credit”) Report Requests**

In order to detect any of the red flags identified above when a credit or background report is sought, University personnel will take the following steps to assist in identifying address discrepancies:

1. At the time a request for a credit report is made to the consumer reporting agency, require written verification from the person that the address provided by the person is accurate.
2. In the event that notice of an address discrepancy is received, verify that the credit report pertains to the person for whom the requested report was made.
3. Report to the consumer reporting agency an address for the person that the University has reasonably confirmed is accurate.

## **VI. Preventing and Mitigating Identity Theft**

In the event University personnel detect any identified red flags, such personnel shall notify their supervisor or the individual designated as the department’s Identity Theft Prevention Officer. Depending on the department’s assessment of the degree of risk posed by the red flag, one or more of the following steps should be taken.

### **A. Prevent and Mitigate**

1. Delay opening an account until a reasonable belief has been formed that the person for whom a business relationship is being established has been properly identified;
2. Continue to monitor a covered account for evidence of identity theft;
3. Contact the person for whom a red flag was detected;
4. Place the account on hold to prevent unauthorized access or use;
5. Change any passwords or other security devices that permit access to covered accounts;
6. Provide the person with a new identification number or account number;
7. Notify the Program Administrator for determination of the appropriate step(s) to take;
8. Notify UAB Police Department, Criminal Investigation Division;

*Appendix G Continued...*

9. Make corrections to the account to remove unauthorized activity, but maintain documentation to support an investigation;
10. File or assist in filing a Suspicious Activities Report (“SAR”); or

11. Determine that no response is warranted under the particular circumstances.

## **B. Protect Covered Account Personal Identifying Information (PII)**

In order to further prevent the likelihood of identity theft occurring with respect to covered account PII, the department's Identity Theft Prevention Officer shall take the following steps with respect to its internal operating procedures. These steps may require coordination with UAB Information Technology, Health System Information Services, or any other division responsible for the department's technical support.

1. Secure all websites containing the ability to access covered account PII;
2. Ensure that office computers with access to covered account PII are password protected;
3. Avoid use of Social Security Numbers when possible;
4. Ensure computer virus protection is up to date;
5. Require and keep only the kinds of information that are necessary for University purposes;
6. Properly store and secure all paper documents, files, CDs, floppy disks, zip drives, flash drives, tapes, and backups containing covered account PII in locked cabinets that are not accessible by any unauthorized individual;
7. Store file cabinets containing covered account PII in a locked room that is not accessible by any unauthorized individual;
8. Designate an employee within the department who will be responsible for controlling keys to the file cabinet and room, authorizing copies of the keys, and ensuring distribution of those keys only to employees with legitimate authorized need;
9. Ensure that sensitive papers are not left on employees' desks when they are away from their workstations and that employees work with data in such a way as not to cause an unauthorized disclosure of information;
10. Include tracking and delivery confirmation when the University is legally required to provide PII to a third-party; and
11. Ensure complete and secure destruction of paper documents, computer files, and other data storage mechanisms containing covered account PII when a decision has been made to no longer maintain such information.

## **VII. Program Administration**

### **A. Oversight**

The President of the University, or her or his designee, shall appoint a Program Administrator responsible for the identity theft prevention program. The Program Administrator shall work with the identity theft prevention officers designated by the departments to develop,

*Appendix G Continued...*

implement, and monitor the effectiveness of this program and policy. Also, the Program Administrator shall communicate policy changes and updates to the Program.

## **B. Staff Training and Compliance Reports**

1. The individual designated as the identity theft prevention officer for a department shall coordinate with the Program Administrator to provide staff training that is necessary to detect, prevent, and mitigate identity theft.
2. Periodically, as requested by the Program Administrator, the department's identity theft prevention officer shall submit a report to the Program Administrator on compliance with this Program. The annual report should include all known identity theft incidents that have occurred during the year. Also, the annual report should address the effectiveness of this policy and related procedures against the risk of identity theft. Any recommendations for changes to the Program should be included as well.

## **C. Service Provider Arrangements**

In the event the University engages a service provider to perform an activity in connection with one or more covered accounts, the University, through its contract review process, shall take the following steps to ensure the service provider performs its activity in accordance with reasonable policies and procedures designed to detect, prevent, and mitigate the risk of identity theft.

1. Require in any contract that service providers have identity theft policies and procedures in place; and
2. Require in any contract that service providers report any red flags or identity theft incidents associated with University accounts/records to the University employee with primary oversight of the service provider relationship.

## **D. Non-disclosure of Specific Practices**

For the effectiveness of the University's Identity Theft Prevention Program, knowledge about specific red flag identification, detection, mitigation, and prevention practices should be limited to the Program Administrator, Identity Theft Prevention Officers, and departmental employees who are responsible for the implementation of this policy. Any documents that may be reviewed or produced in order to develop or implement this Program that list or describe such specific practices and the information those documents contain are considered confidential and should not be shared with other employees or the public. Also, all documents reviewed or produced as a result of identity theft, or in the investigation of potential identity theft, are considered confidential.

## **E. Program Updates**

Changes in Federal regulations may require immediate changes to this policy. Also, the Program Administrator shall periodically review and update this policy and program to reflect changes in risks to customers and the University from identity theft. In doing so, the Program Administrator will consider the University's experiences with identity theft incidents, changes in

identity theft methods related to the prevention, detection and mitigation of identity theft, and changes in the University's business arrangements with other entities. After considering these factors and others as deemed necessary, the Program Administrator will be responsible for recommending policy changes to the appropriate University administrators.

### **VIII. Implementation of Policy**

The Vice President for Financial Affairs and Administration through the Associate Vice President for Financial Affairs is responsible for procedures to implement this policy.



## NUCLEAR MEDICINE TECHNOLOGY PROGRAM

# APPENDIX H: IDENTITY THEFT PREVENTION POLICY UAB LIST OF COVERED ACCOUNTS

**As of March 1, 2011**

The definition of a “covered account” is promulgated by the following regulatory agencies: Federal Trade Commission (FTC) 16 CFR 681.2; Department of the Treasury Office of the Comptroller of the Currency (OCC) 12 CFR 41.9; Federal Reserve System (FRS) 12 CFR 222.9; Federal Deposit Insurance Corporation (FDIC) 12 CFR 334.9; Department of the Treasury Office of Thrift Supervision (OTS) 12 CFR 571.9; National Credit Union Administration (NCUA) 12 CFR 717.9.

*A “covered account” means: (i) an account that a financial institution or creditor offers or maintains, primarily for personal, family, or household purposes, that involves or is designed to permit multiple payments or transactions, such as a credit card account, mortgage loan, automobile loan, margin account, cell phone account, utility account, checking account, or savings account; and (ii) any other account that the financial institution or creditor offers or maintains for which there is a reasonable foreseeable risk to customers or the safety and soundness of the financial institution or creditor from identity theft, including financial, operational, compliance, reputation or litigation risks.*

The University will evaluate its accounts and customer relationships to update this list periodically as required by the regulations.

### **Covered Accounts Identified as of March 1, 2011:**

1. **Banner Student Records** - Undergraduate Admissions, Graduate Admissions, Registrar’s Office, Financial Aid, Housing Office, Student Accounting, and all other departments with access to student records in Banner
2. **Student Loan Accounts** - Office of Student Accounting Services
3. **Campus Card** – UAB Campus Card Office
4. **Blazer Bucks Accounts** (BlackBoard) - UAB Campus Card Office
5. **Advancement Accounts** (Banner: Alumni and other Contributors) - Office of Development, Alumni, and External Relations

6. **Retiree Payment Accounts** - Benefits Office - Human Resources Management
7. **Leave Without Pay Benefits Accounts** - Benefits Office - Human Resources Management
8. **Patient Accounts** - Dental Clinics - School of Dentistry
9. **Patient Accounts** - Optometry Clinic – School of Optometry