THE UNIVERSITY OF MISSISSIPPI MEDICAL CENTER

2002 - 2003

DIAGNOSTIC RADIOLOGY RESIDENT HANDBOOK

INTRODUCTION

The University of Mississippi Medical Center offers a fully accredited residency program in the field of diagnostic radiology. As the only radiology residency training program in the State of Mississippi, we maintain a strong commitment to residency education in our specialty. The educational program is designed to equip residents with the skills necessary to excel in a career as a practicing general radiologist or to enter a competitive subspecialty fellowship program.

The polices and procedures contained within this Radiology Resident Handbook are to be used as guidelines, and should not be construed as an assurance that a particular policy or procedure will be followed in every case. The contents of this handbook are subject to change at any time at the discretion of the Radiology Department. This handbook is not a contract of employment. This handbook serves as a supplement to the UMC Employee Handbook which is also made available to all radiology residents.

EQUAL EMPLOYMENT OPPORTUNITIES

The University of Mississippi Medical Center's education, research, service programs and facilities are opened to every qualified person. Equal employment opportunity is announced, provided and assured for all persons; and affirmative action is taken to guarantee that individuals are hired, trained, promoted, and in all ways treated equally without regard to race, color, religion, sex, national origin, marital status, veteran status, age or disability as defined by law.

PROGRAM GOALS

The primary goals of the Radiology Department are to provide exemplary patient care, to train radiologic health care professionals, and to expand the body of radiographic knowledge through research.

Diagnostic Radiology encompasses a variety of diagnostic imaging techniques, including all aspects of roentgen diagnosis, nuclear radiology, diagnostic ultrasound, magnetic resonance imaging, and the use of other forms of radiant energy. The radiology residency program offers a quality

graduate medical education experience of excellent scope and depth in all of these associated diagnostic disciplines.

The clinical training provides for progressive, supervised responsibility for patient care, and insures that the supervised resident performs those procedures commonly accepted in all aspects of diagnostic radiology. The training includes progressive study and experience in all diagnostic radiologic subspecialties, as well as diagnostic radiologic physics, radiation biology, radiation protection, and pathology.

The education of diagnostic radiology occurs in an environment which encourages the interchange of knowledge and experience among residents in the program, and with residents in other major clinical specialties located at this institution.

Please refer to subsection in this handbook entitled **"Resident Rotation Schedule"** for more detailed description of program goals with respect to specific objectives for each major rotation.

THE MATCH

The Radiology Department participates in the National Resident Matching Program. One year of approved post-graduate clinical training (internship) is required prior to beginning a four-year radiology residency. Medical students who are participating in the match should rank our program in the "S" match in Diagnostic Radiology. They will be responsible for obtaining their internship prior to beginning the radiology residency, and they usually arrange this also through the match at the same time.

MEDICAL LICENSURE REQUIREMENTS

In order to begin a radiology residency at The University of Mississippi Medical Center, one must be able to obtain a Mississippi Medical license. All radiology resident applicants are informed of this requirement. The Mississippi State Board of Medical Licensure requires that all residents must have passed both Steps I and II of the USMLE to obtain a medical license. For residents who have graduated from medical school prior to 1994 and have already passed the FLEX or National Board Examinations, the USMLE

is **not** a requirement. Although the University is committed to students through the National Resident Matching Program (NRMP), it need not be committed to students who cannot begin their programs on July 1 because of lack of medical licensure.

HOUSE STAFF PROFESSIONAL LIABILITY INSURANCE

As of May 1, 1995, The University of Mississippi Medical Center and the Board of Trustees of the Institutions of Higher Learning have established a professional liability program and tort claims fund which will cover all matters relative to house staff professional liability. The below statement of professional liability is distributed to each of our residents as well as to all new applicants to the residency program.

Statement of Professional Liability Indemnity and Related Expenses Protection for UMMC House Officers:

WHEREAS, THE UNIVERSITY OF MISSISSIPPI MEDICAL CENTER and the BOARD OF TRUSTEES OF STATE INSTITUTIONS OF HIGHER LEARNING mutually warrant under this covenant that a trust fund has been established sufficient to provide one million dollar per occurrence liability coverage per annum for each resident, intern and fellow employed by UMMC, said trust fund established May 1, 1995, and professional liability coverage becomes effective as of that date and coverage shall be continuous from that date.

WHEREAS, professional liability coverage is subject to the following conditions:

1. PERSON'S INSURED

   PERSON'S INSURED shall be understood to include all interns, residents and fellows (hereinafter referred to as house officers), while acting within the scope of their duties for the University and for gratuitous acts elsewhere. It shall be understood that any activity at other hospitals, clinics, or professional settings shall be considered in the course of their duties as long as such activity is part of The University program, and the house officer is not receiving income from that activity, other than from The University. Any individual

who qualified as a person insured at the time of an occurrence giving rise to a claim hereunder shall be considered as a person insured.

2. COVERAGE

The IHL/UMMC Professional Liability Program will pay all sums a House Officer is required or must pay as a result of damages because of bodily injury or property damage either awarded by a court of competent jurisdiction or through a voluntary settlement entered into with the approval of the Vice Chancellor of UMMC.

The Professional Liability Program will also pay all expenses incurred in the investigation, defense or disposition of any claims reported under this coverage, including all legal expenses incurred at direction or within the approval of UMMC.

The UMMC/IHL Tort Claims Fund has the right and duty to defend any claim or suit reported under this program, however, UMMC/IHL retains the right to investigate and settle any claim or suit as considered appropriate by the UMMC Tort Claims Committee or the UMMC Vice Chancellor.

3. LIMITS OF LIABILITY

It shall be understood that the limits of liability as provided by this fund shall apply per House Officer, regardless of the number of House Officers involved or named in litigation filings.

Nothing contained herein shall be held to vary, alter, waive or extend any of the conditions, provisions, agreements or limitations to this covenant, unless expressly stated above.

Resident Physicians Professional Liability Insurance

Resident physicians at The University of Mississippi Medical Center are covered with professional liability insurance (occurrence type) for all duties related to official program rotations. Insurance coverage, in the amount of $1,000,000/3,000,000, is provided through The University of Mississippi Medical Center Residents/Interns/Fellows Professional Liability Program. This program provides professional liability coverage for residents, interns,

and fellows while at The Medical Center or while on official rotation to another hospital or clinic. Residents under The University program are not covered under the Federal Tort Claims Act.

SUPERVISED RESPONSIBILITY

The radiology training program provides for progressive, supervised responsibility for patient care. The supervisory line of responsibility for care of patients by residents is from the more junior to the more senior residents, followed by radiology subspecialty fellows, followed by radiology faculty, followed by radiology division heads, followed by the radiology chairman. In the vast majority of cases a radiology faculty member directly supervises the radiology resident. All radiologic interpretations must be reviewed with a radiology faculty member, and that radiology faculty member's name must be included on the formal dictation.

INTRODUCTORY LECTURE SERIES

An introductory lecture series is given especially for the benefit of new incoming first year residents each summer. The textbook Fundamentals of Diagnostic Radiology, by Brant and Helms is used for this lecture series. New first year residents are encouraged to purchase this textbook. These lectures are held at 12 noon and/or at 4:00 p.m. in the Radiology Conference Room during the months of July and August.

RESIDENT ROTATION SCHEDULE

An annual resident rotation schedule is distributed each year. A copy of the schedule can be found at the back of this handbook. The rotation schedule is designed to provide the radiology residents with a well rounded education in diagnostic radiology during their four years of residency. Residents rotate from one service to another at four week intervals (52 rotations per 4 year residency). Any changes in the residents' rotation schedule must be approved by the Program Director. Third year radiology residents are consulted for their rotation preferences for their senior year, and these preferences are given strong consideration during the construction of the next year's schedule.

Listed below are the rotations for the radiology residents. In the parenthesis beside each rotation is the average number of months that a resident spends on each rotation. Slight variability in the number of months on each rotation does occur with individual residents.

General Radiology	**(10 months)**
Mammography	**(3 months)**
Musculoskeletal	**(3 months)**
Pediatric Radiology	**(4 months)**
Ultrasound	**(4 months)**
Nuclear Medicine	**(6 months)**
Body CT	**(4 months)**
Neuro CT	**(4 months)**
Vascular/Interventional Radiology	**(4 months)**
Neuro Radiology Procedures	**(3 months)**
Cardiovascular Radiology	**(1 month)**
Neuro MRI	**(3 months)**
AFIP	**(1 month)**
OB ultrasound	**(1 month)**
Research	**(1 month)**
	52 rotations

A separate schedule is distributed each month for the residents assigned to General Radiology. There are five sub-rotations on the General Radiology Schedule. The mammography rotation provides exposure to breast disease both at The University Hospital and The University Medical Mall. The fluoroscopy sub-rotation provides exposure primarily to barium studies of the GI tract. The front reading room rotation provides exposure to plain film interpretation with a heavy emphasis on chest radiology and on bone radiology. Interpretation of films in the Emergency Room and films in the intensive care units are included in the front room sub-rotation. The "House Officer of the Day" (First Call Resident) sub-rotation provides exposure to intravenous pyelograms to plain film tomography. The officer of the day is also responsible as the first person called if there are any emergencies that develop within the department. The officer of the day is not to leave the radiology department at any time during the day unless he has made arrangements for another resident to stand in for him and has notified the radiology front desk accordingly. When the officer of the day has completed

IVP's and the tomograms for the day, he is expected to provide coverage and assistance to the front reading room. The musculoskeletal rotation focuses on pathology specific to the musculoskeletal system using plain film, CT and MRI techniques.

In each of the above listed rotations, the educational goals are for the resident to acquire the knowledge, technical skills, and other attributes which are commonly accepted for performance of high quality patient care in each particular area. This is learned through the aid of progressive supervised responsibilities for patient care under the direction of the faculty, as well as through the daily conference schedule curriculum. The residents are encouraged to read on each rotation; initially basic textbook materials, and later more advanced materials. The residents are also expected to read specifically on disease processes and/or procedures that they come across on a day-to-day basis. The residents are expected to develop adequate knowledge regarding normal and pathologic physiology in each rotation category, including the biologic and pharmacologic actions of materials administered to patients in diagnostic studies in each rotation. An additional goal in the training of residents is to develop a professional attitude with respect to their patients, peers, clinical colleagues, and support personnel. Ultimately, in each rotation, the level of supervised responsibility and independence given to the resident will be dependent on their knowledge, skill and experience.

In all rotations, the new residents who have never previously been on a particular rotation are expected to initially assume an observatory role; observing faculty and other more senior residents while receiving instruction. At any appropriate interval as judged by the faculty or more senior residents, the new resident will slowly begin to assume patient care responsibilities under close direct supervision and instruction. The ultimate amount of responsibility or independence given to the resident will always be dependent on their level of experience, knowledge, and technical skill. However, at no time will the resident be allowed to make interpretations and generate reports on the final record without being "checked out" on each case by a faculty member. In addition, on all invasive studies, a faculty member will be present to provide supervision during the key portion of the procedure.

On the mammography sub-rotation on the general radiology rotation, the goals are for the resident to develop knowledge of anatomy, physiology and

pathology of the breasts. He should also develop the skills necessary to obtain pertinent clinical history and physical findings. He should develop an imaging work-up treatment plan and serve as a consultant to referring physicians. He should become skilled and proficient in the supervision, performance, and interpretation and reporting of all imaging modalities and procedures relating to breast imaging techniques, needle localizations, breast biopsies and cyst aspirations. He should be familiar with the potential benefits, risks and alternatives of these procedures and should be able to administer appropriate pre-procedure and post-procedure follow-up care when appropriate.

On the gastrointestinal sub-rotation on the general radiology rotation, the goals are for the resident to develop knowledge of anatomy, physiology and pathology of the gastrointestinal tract. He should also develop the skills necessary to obtain pertinent clinical history and physical findings. He should be able to develop an imaging work-up treatment plan, and serve as a consultant to referring physicians. He should become skilled and proficient in the supervision, performance, interpretation and reporting of all imaging modalities and procedures related to the GI tract, including barium swallow, upper GI series, small bowel studies, barium enema, T-tube cholangiography, ERCP's, and enteric tube manipulations. He should be familiar with the potential benefits, risks and alternatives of these procedures and should be able to administer appropriate pre-procedure and post-procedure follow-up care when appropriate.

On the front room sub-rotation on the general radiology rotation, the goals are for the resident to develop knowledge of anatomy, physiology and pathology of essentially all areas of the body, which are evaluated by plain film radiography. He should also develop the skills necessary to obtain pertinent clinical history and physical findings. He should be able to develop an imaging work-up treatment plan and serve as a consultant to referring physicians. He should become skilled and proficient in the supervision, performance, interpretation, and reporting of all plain film studies, especially related to the chest and the musculoskeletal system, including plain films, portable films, and emergency room films.

On the "Officer of the Day" sub-rotation of the general radiology rotation, the goals are for the resident to develop knowledge of anatomy, physiology and pathology of the genitourinary system. He should also develop the skills necessary to obtain pertinent clinical history and clinical findings. He

should be able to develop an imaging work-up treatment plan and serve as a consultant to referring physicians. He should become skilled and proficient in the supervision, performance, interpretation, and reporting of all imaging modalities and procedures related to the genitourinary system, including performance of intravenous pyelograms, cystograms, retrograde urethrograms, and hysterosalpingograms. He should be familiar with the potential benefits, risks and alternatives of these procedures and should be able to administer appropriate pre-procedure and post-procedure follow-up care. Also included in the duties of the "Officer of the Day" is the performance of plain film tomography, which is becoming less and less common. The "Officer of the Day" is also responsible as the first person called if there are any emergencies that arise within the department. The "Officer of the Day" is not to leave the radiology department at any time during the day unless he has made arrangements for another resident to stand in for him and has notified the radiology front desk accordingly.

On the pediatric radiology rotation, the goals are for the resident to develop knowledge of anatomy, physiology, and pathology of infants and children. He should also develop the skills necessary to obtain pertinent clinical history and clinical findings. He should be able to develop an imaging treatment plan and serve as a consultant to referring physicians. He should become skilled and proficient in the supervision, performance, interpretation, and reporting of all imaging modalities and procedures relating to pediatric radiology. He should be familiar with potential benefits, risks and alternatives of those procedures and should be able to administer appropriate pre-procedure and post-procedure follow-up care.

On the ultrasound rotation, the goals are for the resident to develop knowledge of anatomy, physiology, and pathology as these relate to ultrasound examinations. He should also develop the skills necessary to obtain pertinent clinical history and physical findings. He should be able to develop an imaging work-up treatment plan and serve as a consultant to referring physicians. He should become skilled and proficient in the supervision, performance, interpretation, and reporting of all ultrasound related imaging procedures with the exception of cardiac ultrasound which is included in the cardiovascular radiology rotation. He should be familiar with the potential benefits, risks, and alternatives of these procedures and he should be able to administer appropriate pre-procedure and post-procedure follow-up care.

On the nuclear medicine rotation, the goals are for the resident to develop knowledge of anatomy, physiology and pathology as they relate to nuclear medicine. He should also develop skills necessary to obtain pertinent clinical history and physical findings. He should be able to develop an imaging work-up treatment plan and serve as consultant to referring physicians. He should become skilled and proficient in the supervision, performance, interpretation and reporting of all nuclear medicine studies including (but not limited to) bone scans, renal scans, lung scans, thyroid scans, liver/spleen scans, hepatobiliary scans, GI bleeding scans, cardiac scans, CNS scans, gallium scans, etc. Also included in this rotation, is training in the administration of radionuclides and radiolabeled substances for the treatment of disease. The resident should be familiar with potential benefits, risks and alternatives of these procedures and should be able to administer appropriate pre-procedure and post-procedure follow-up care.

On the body CT/MR rotation, the goals are for the resident to develop knowledge of anatomy, physiology and pathology as they relate to these imaging modalities. As in all rotations, the resident should develop knowledge of the physics and related subjects for these modalities. He should also develop the skills necessary to obtain pertinent clinical history and physical findings. He should be able to develop an imaging work-up treatment plan and serve as a consultant to referring physicians. He should become skilled and proficient in the supervision, performance, interpretation and reporting of non-neuro CT and MR imaging. All CT and MR imaging, which is not related to the CNS system, spine or head and neck areas are included in this rotation. He should be familiar with potential benefits, risks and alternatives of these procedures and should be able to administer appropriate pre-procedure and post-procedure follow-up care.

On the Neuro CT rotation, the goals are for the resident to develop knowledge of anatomy, physiology and pathology as they relate to neurological diseases as well as head and neck diseases. He should also develop skills necessary to develop pertinent clinical history and physical findings. He should be able to develop an imaging work-up treatment plan and serve as a consultant to referring physicians. He should become skilled and proficient in the supervision, performance, and interpretation and reporting of CT exams as they relate to CNS diseases, diseases of the spine and diseases of the head and neck. He should be familiar with potential benefits, risks and alternatives of these procedures and should be able to administer appropriate pre-procedure and post-procedure follow-up care.

On the vascular and interventional radiology rotation, the goals are for the resident to develop knowledge of anatomy, physiology and pathology as they relate to vascular and interventional radiology procedures. He should also develop the skills necessary to obtain pertinent clinical history and physical findings. He should be able to develop an imaging work-up treatment plan and serve as a consultant to referring physicians. He should become skilled and proficient in the supervision, performance, and interpretation and reporting of all non-neuro vascular and interventional radiology procedures. This includes, but is not limited to, diagnostic arteriography, diagnostic venography, and percutaneous revascularization procedures such as angioplasty, fibrinolysis, artherectomy, and stent placement. He should be familiar with embolization procedures, inferior vena cava filter placement and venous sampling procedures. He should become familiar with percutaneous management of dialysis graft fistulas. He should also become familiar with all GU related interventional procedures and GI access interventional procedures. Also included on this rotation, are all imaging guided non-neuro drainage procedures and biopsy procedures. TIPS is also included in this rotation. Cardiac diagnostic and interventional procedures are not included on this rotation. Especially important in this rotation, the resident should be familiar with potential benefits, risks and alternatives of these procedures and should be capable of administering appropriate pre-procedure and post-procedure follow-up care.

On the neuroradiology rotation, the goals are for the resident to develop knowledge of anatomy, physiology and pathology as they relate to these procedures. He should also develop the skills necessary to obtain pertinent clinical history and physical findings. He should be able to develop an imaging work-up treatment plan and serve as a consultant to referring physicians. He should become skilled and proficient in the supervision, performance, and interpretation and reporting of these procedures in the head and neck region, spinal arteriography, and myelography. The residents will also receive some exposure to interventional neuroradiology procedures as well during this rotation. He should be familiar with the potential benefits, risks and alternatives of neuroradiology procedures and should be able to administer appropriate pre-procedure and post-procedure follow-up care.

On the Neuro MR rotation, the goals are for the resident to develop knowledge of anatomy, physiology and pathology as they relate to diseases

of the head and neck, central nervous system and spine. He should also develop the skills necessary to obtain pertinent clinical history and physical findings. He should be able to develop an imaging work-up treatment plan and serve as a consultant to referring physicians. He should become skilled and proficient in the supervision, performance, interpretation and reporting of all MRI studies related to the above. He should be familiar with the potential benefits, risks and alternatives of these procedures and should be able to administer appropriate pre-procedure and post-procedure follow-up care.

On the cardiovascular rotation, the resident will go out of the radiology department and visit the imaging section of the Cardiology Department during this month. Again, the goals are for the resident to develop knowledge of anatomy, physiology and pathology of the heart. He should also develop skills necessary to obtain pertinent clinical history and physical findings. He should also develop skills necessary to obtain pertinent clinical history and physical findings. He should be able to develop an imaging work-up treatment plan and serve as a consultant to referring physicians. He should become familiar with the performance, interpretation and reporting of cardiac imaging studies related to the heart, including diagnostic cardiac catheterizations, interventional cardiology procedures such as coronary angioplasty and cardiac ultrasound procedures. Note that cardiac nuclear medicine canning is included on the residents' nuclear medicine rotation. The resident should be familiar with potential benefits, risks and alternatives of these procedures and should be familiar with the pre-procedure and post-procedure follow-up care that is involved.

It is anticipated that each resident will rotate through the musculoskeletal section for two months during his or her four-year residency. For the more junior residents, the emphasis will be on the anatomy and basic pathological processes of the musculoskeletal system. For the more senior resident, an added emphasis will be placed upon understanding the practical applications of MR physics. In order to take full advantage of his time in this section, each resident would be well advised to read as much as possible **BEFORE** beginning this rotation. It is strongly recommended that he read all of the *Helms* chapters in Brant & Helms, become ultimately familiar with the bones and joints of the wrist, the bones and joints of the ankle, and the muscles and tendons of the rotator cuff. The resident will have the responsibility for maintaining the high quality of orthopedic CT scans. This includes obtaining clinical history from the patient, referring physician and/or chart, as appropriate, reviewing any radiographs prior to beginning

the CT scan, learning how to protocol CT scans to best demonstrate the area of interest and understanding how to create two and three dimensional CT reconstructions. The musculoskeletal resident is also strongly encouraged to attend the weekly Orthopedic Conference held every Tuesday at 7:00 a.m. in the Lecture Room 3A.

AFIP

Attendance at the Armed Forces Institute of Pathology (AFIP) six week course in Washington, DC is expected of the radiology residents. The Radiology Department provides registration, travel and lodging for the resident. The Residency Program Coordinator arranges scheduling for this course. In most cases, residents attend this course during their third year of training.

CONFERENCES

A comprehensive conference schedule is designed to instruct the resident in the imaging work-up of patients and in the skills of radiologic interpretation. There is active resident and faculty participation in these conferences. The full range of radiographic subspecialties are represented in these conferences, including radiologic physics, radiation biology and radiation protection. A Journal Club conference is presented on a regular basis.

A monthly conference schedule is distributed each month. There are two conferences per day, one at Noon and the other at 4:00 p.m. Resident attendance at all conferences is expected except in the infrequent occasions where the resident must be occupied with emergency patient care. The residents are expected to be present promptly at the beginning of each conference; a written roll of attendance is kept for documentation.

Conferences encompass all areas of radiology. Specialty conferences are held monthly in conjunction with Gastroenterology, Emergency Medicine, Internal Medicine, and Gynecology. Residents and staff on Pediatrics and Adult Body CT/MRI rotations attend Pediatric and Adult tumor board conferences. Mortality and Morbidity conferences are held monthly. Resident given trauma lectures take place in the first half of the year prior to the start of the new first call residents. Physics lectures take place during six weeks of the second half of the year. Special afternoon lectures for the first year residents are given by the associate program director/program director in the afternoons 3 days of each week during the first half of the year. Several times a year, visiting professors from throughout the country are invited to provide intense symposia for the residents in their subspecialty fields of expertise.

See enclosed memorandum (no date) at the end of this section for details on documentation of conference attendance.

RESIDENT CALL

The first call resident is responsible for interpretation of all the emergent inpatient and emergency room studies during the evening and night hours as well as any preoperative chest films that arise after hours. The first call resident is required to write and fax his/her preliminary findings to the requesting service. The original copy is attached to the requisition for staff review. At any time that the first call resident is uncomfortable or inexperienced with anything that arises, he is expected to obtain assistance from the second call resident. Like the first call resident, the second call resident is involved in reading plain films during the routine hours of the weekend.

First year residents will not begin call until they have completed six months of radiology training. At this time, first call consists of a "float" call system. Two residents will be assigned to "float" each month. One of these two residents will work a 12 hour day shift. He/she will come to work at 7:00 a.m. and meet the night shift resident in the ER reading room. At this time, the on call radiology staff will review the studies performed after hours with the day shift resident. The night shift resident is not required to stay for this check out, provided that all of the after hours plain films have been reviewed and preliminary findings have been recorded. Following AM check out with the staff physician, the day shift resident will dictate the cases and then report to the Front Room where he/she will be assigned for the remainder of the working day (4:00 p.m.). At 4:00 p.m., the day shift resident will assume first call responsibilities until 7:00 p.m. when the night shift resident returns. The night shift resident will work 7:00 p.m. to 7:00 a.m. (These hours may very slightly depending on the workload).

The float resident will divide the month with each resident working approximately 2 weeks of days and 2 weeks of nights. It is not possible in most months to give the two residents exactly the same number of days and the same number of nights; however, over the course of the year, each resident will have the same number of day and night shifts. The residents who are not on the float call rotation in any given month will be responsible for covering a portion of the weekends. Weekend shift will be from 7:00

a.m. to 7:00 a.m. The class currently taking first call and the Chief Resident will decide the specifics on how weekend coverage will be handled. Since first year residents cannot take call until they have had 6 months of training, the majority of the residents time on float call will be between January of their first year and January of their second year.

As the float call system is relatively new to our program, we still have some bugs that need to be worked out. The above rules may change at some point in the future.

During the third year of residency, the residents will be assigned to second call. The decision on when to move an individual resident up to second call is made by the radiology staff. The frequency of second call averages approximately one out of every 5 nights. The second call resident serves as a back up resident for any questions or problems that the first call resident may have. The second call resident is also responsible for the reading of weekend plain films, as is the first call resident. For simple diagnostic arteriograms on call, the second call resident is expected to notify the faculty member on vascular radiology call prior to beginning the procedure. For any interventional radiology call case, the second call resident is expected to notify the faculty member on interventional staff call prior to obtaining consent on the case. At any time that the second call resident has problems or needs assistance, there are always faculty member on general radiology call, vascular radiology call and interventional radiology call to provide guidance and assistance.
A special introductory call schedule "buddy call" is set up for new first year residents. During this introductory call period, the new first year residents will be on call periodically. During the first six months of residency, the new first year residents will be assigned on call with an experienced first call resident. This allows the new residents to learn about first call and first call responsibilities. However, the new first year residents on introductory call do not stay in the hospital all night, but go home at 10:00 p.m. (leaving the experienced first call resident in the hospital).
The Chief residents typically makes out the call schedules with support from the first and second call resident pool.

HOLIDAYS

Full time UMC employees receive ten paid holidays each year. The

holidays are New Year's Day, Martin Luther King, Jr. Day, Memorial Day, 4th of July, Labor Day, Veteran's Day, Thanksgiving Day and the day after Thanksgiving, Christmas Day, and the employee's birthday. The residents are expected to schedule their birthday holiday with the Chief Resident on any day of their birthday month that is available. Ideally, this should be done several months in advance.

VACATION

Personal leave is provided for vacation and personal business. Personal leave also must be used for illness requiring absence of one day. As a general rule, residents receive approximately eighteen days of vacation per year during the first three years and twenty-one days per year in subsequent years. Personal leave must be scheduled through the Chief Resident. As a general rule, no more than four residents will be allowed out of the department on any one day. Be aware that June and July are particularly tight months for the department and scheduling vacation time during these months may be difficult. Senior residents in particular must exercise careful planning of their vacation days. Historically, senior residents often try to save some vacation days with the plan of taking these days during the last month or two of residency. However, without careful planning and scheduling of vacation days well in advance with the Chief Resident, the senior resident may find that these days are already booked and unavailable. Uncompensated leave (leave without pay) has potential of abuse; it is not allowed unless arrangements have been made with the Chairman or Program Director, and this is very rare. The resident is referred to the Employee Handbook for further details.

Be aware of the following statement of policy regarding radiology residencies as stated by the *American Board of Radiology*. *"Within the required period(s) of graduate medical education, the total such leave" (note from program director-this includes all leave including illness, maternity leave, etc.) "and vacation time may not exceed twelve (12) calendar weeks (60 working days) in any two (2) years, eighteen (18) calendar weeks (90 working days) in any three (3) years, or twenty-four (24) calendar weeks (120 working days) in four (4) years. If a longer leave of absence is granted, the required period of graduate medical education must be extended accordingly."*

MEDICAL LEAVE

Residents earn medical leave credit for each month of service, at a rate of approximately one day per month. During the first three months of employment, the resident accrues, but is not eligible to take paid medical leave except in case of death in the immediate family. The resident is referred to the Employee Handbook for further details. (Please be aware that the first 8 hours of medical leave is personal vacation time)

GETTING PULLED

Due to absences from work of other radiology residents (vacation, sick leave, etc.), it will occasionally be necessary for the Chief Resident to "pull" a resident from one rotation to another in order to provide adequate coverage of the radiology department.

DOCUMENTATION OF EXPERIENCE

Throughout their training, residents are required to document their experience in vascular and interventional procedures, neuro radiological procedures, and nuclear medicine studies. The resident is expected to keep some form of logbook on all of these cases that they have been involved with, and these should be maintained at a current level (Many areas keep electronic documentation). The Program Director may request to see this documentation of experience at any time. See enclosed memorandum of August 28, 1995 at the end of this section for further details.

ACLS

Each resident must have Advanced Cardiac Life Support (ACLS) training.

TEACHING FILES

Multiple teaching files of images referable to all aspects of diagnostic radiology are available for use by the residents. Both an older and a newer ACR film teaching file are present in the radiology library and resident lounge. Additionally, multiple teaching files are present on video cassettes, DVD's and the PACS. Teaching files consisting of UMC cases can be found in most of the subspecialty areas throughout the department.

LITERATURE RESOURCES

The Robert Sloan Radiology Library provides a variety of journals, references and resource materials pertaining to progressive levels of education in diagnostic radiology and associated fields. In addition, there are satellite subspecialty libraries found throughout the department. Residents also have access to the Rowland General Medical Library.

RESEARCH

Residents are encouraged to engage in scholarly activity with appropriate faculty supervision. These projects may take the form of basic research

laboratories, or an assimilation of well analyzed material or even the reporting of individual cases. All residents who began training after 2000 are required to become involved in at least one such research program during their training.

SALARY

The first year residency salary for the 2000 - 2001 year is $32,686.00. That salary progresses to a fifth year resident salary of $37,620.00.

HEALTH INSURANCE

Health insurance is provided through the Medical Center to the resident. However, the resident must pay a fee if he wishes to include dependents on his health insurance plan. Multiple other insurance programs are available through the Medical Center as well as other benefits and savings plans. The resident is directed to the UMC Employee Handbook for further details.

RADIOLOGY CHIEF RESIDENT

The radiology faculty selects the Chief Resident for radiology each year. The Chief Resident is responsible for scheduling vacation and other time off for the residents. The Chief Resident also is responsible for making out the resident call schedules. The Chief Resident is also responsible for making out the rotation assignment schedule for those residents who are assigned to general radiology. The Chief Resident is responsible for "pulling" residents from one rotation to another when needed in order to provide adequate coverage throughout the department. The Chief Resident is the radiology residents' representative at the radiology staff meetings. During these regularly scheduled staff meetings, the goals, objectives and effectiveness of the residency program are frequently discussed. The radiology residents are encouraged to provide input into the radiology staff meetings through their Chief Resident.

IN-SERVICE EXAMINATION

The radiology in-service examinations as set up by the *American College of Radiology* are given to the radiology residents each year. This most often occurs in the early part of February. The results of this examination give the Department of Radiology feedback on areas of strengths and weaknesses in the program. The results also give feedback to the radiology residents. The individual resident scores are kept confidential and are discussed with the resident either by the Program Director or the Chairman. In order to achieve full resident participation in this examination, the residents are not allowed to schedule vacation on this date.

RESIDENT EVALUATIONS

Written resident evaluations are completed on each resident at the end of each rotation at the end of each month. These evaluations are completed by one of the faculty members who were actively involved with the individual resident during that month. At the end of each quarter (3 months), these evaluations are organized and reviewed with each resident on a one-to-one basis with the Program Director. At this time, an opportunity for discussion or questions is made available. A copy of the resident evaluation form is found later in this handbook.

PROGRAM EVALUATION

The radiology residents are required to provide written evaluations of each faculty member and the program at least once per year. Provisions are made to insure that these evaluations remain anonymous. Additional resident feedback to the program is available on an on-going basis through their Chief Resident to the radiology staff meetings or through direct discussion with the Radiology Program Director. In addition, exit interviews for the radiology residency program are conducted during the last one or two months of residency. Resident meetings with the Program Director are scheduled every two to three months. In these meetings, the residents meet as a group with the Program Director to discuss any concerns or ideas that they may have in order to effect improvement in the program. Note: Copies of the faculty evaluation form and the exit interview form are found later in this handbook.