DIAGNOSTIC RADIOLOGY

RESIDENT HANDBOOK

For Academic Year

2017-2018
Contents

Notice ............................................................................................................................................. 3
CVC Training .................................................................................................................................. 4
Didactic Morning lectures .............................................................................................................. 4
Discrimination and Harassment ..................................................................................................... 4
Duty Hours ....................................................................................................................................... 5
Election of Chief residents ............................................................................................................. 6
Evaluation ........................................................................................................................................ 6
Fellowship and Residency Research Program (FRRP) ................................................................. 6
General Competencies for ACGME-I .............................................................................................. 6
Informed Consent for Suspected Pregnancy or Pregnant Patients ..................................................... 7
In-Training Exam ............................................................................................................................. 7
Leave of Absence ............................................................................................................................. 8
Maternity Leave ............................................................................................................................... 8
On Call Policies ............................................................................................................................... 8
Prevention/Treatment/Management of Fatigue ............................................................................ 9
Probation System ............................................................................................................................ 10
Procedures Log .............................................................................................................................. 10
Promotion System ........................................................................................................................... 10
RadPrimer ......................................................................................................................................... 11
Required Number of Supervised and Independent Procedures .................................................... 11
Residents Services .......................................................................................................................... 12
Radiology Orientation Session ....................................................................................................... 12
Resuscitative Training ..................................................................................................................... 12
Sick Leaves ......................................................................................................................................... 13
Supervision ....................................................................................................................................... 13
Suspension and Dismissal System ................................................................................................... 13
Telephone Service ............................................................................................................................ 14
Warnings .......................................................................................................................................... 15
Notice

The Diagnostic Radiology Handbook is provided to the residents at the American University of Beirut (AUB), as a guide to and summary on:

- Policies and procedures including residents’ rights and responsibilities
- Accreditation Council for Graduate Medical Education –International (ACGME-I) core competencies and requirements
- Administrative contact information

Residents are expected to become familiar with and comply with all the policies set forth in this handbook within the course and scope of their GME training at the AUBMC and its affiliated teaching institutions. Residents can use this book as a reference to answer questions regarding all policies where the use of the policies is to assist the residents in working in a fair and equitable manner.

As a resident in a Diagnostic Radiology training program, your primary responsibilities are participating in the educational aspects of your program and in the direct care of patients under the supervision of your Program Director.

Your Program Director or his/her coordinator will orient you on the organization and structure of your Diagnostic Radiology training program including educational goals and objectives; duties and responsibilities; and a variety of other matters that are important to you during your training.

**Program Director**

The Graduate Medical Education of Diagnostic Radiology Program Director have an open-door policy where you can meet with Dr. El-Merhi, the Program Director, and his coordinator Mrs. Badiaa Arakji Al-Taki, at any time to discuss any issue in a confidential manner and to provide assistance and support in whatever way needed including addressing concerns.

<table>
<thead>
<tr>
<th>Name</th>
<th>Office Address</th>
<th>Ext.</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fadi El-Merhi, MD, ABR</strong></td>
<td>AUBMC,</td>
<td>5031</td>
<td><a href="mailto:fe19@aub.edu.lb">fe19@aub.edu.lb</a></td>
</tr>
<tr>
<td>Program Director for Medical Education</td>
<td>Garden offices</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Badiaa Arakji Al-Taki, B.S, M.B.A</strong></td>
<td>AUBMC,</td>
<td>5034</td>
<td><a href="mailto:ba66@aub.edu.lb">ba66@aub.edu.lb</a></td>
</tr>
<tr>
<td>Graduate Medical Education Program Coordinator</td>
<td>Garden Offices</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CVC Training

Residents/fellows in Diagnostic Radiology are required to pass the online Central Venous Catheter Course and provide proof of completion of training (i.e. copy of certificate) to the program coordinator. Please check with your program coordinator if you are required to pass the course.

Didactic Morning lectures

It is required and mandatory for all residents to attend the Didactic morning lectures. As per the ACGME-I guidelines: Residents should attend a minimum of 5 hours of didactic session/week.

 Discrimination and Harassment

The AUBMC strives to maintain a work and academic environment which is free from discrimination and harassment of all kinds, and in which all members of the University community treat one another with respect. The University prohibits discrimination or harassment of any kind by or against any student, faculty member, administrator, staff member, AUBMC resident, or any applicant for employment or enrollment at the University. The University will investigate all allegations of discrimination or harassment. If the University concludes that this policy has been violated, the offender will be subject to disciplinary action, up to and including termination of employment or expulsion from the University.

It is also the policy of AUB to provide equal employment opportunity to all candidates for academic and non-academic employment, regardless of their gender, race, religion, color, national origin, disability, marital status, age, creed, citizenship, or veteran status, except as required by Lebanese law concerning employment. Such policy shall apply to all terms and conditions of employment including, but not limited to, recruitment, selection, promotion, upgrading, demotion, transfer, lay-off, termination, rates of pay or other forms of compensation, benefits, and selection for training.

The AUB’s institution-wide policies and procedures are online at:

- Policies Concerning Sexual and Other Discriminatory Harassment
- Procedures to Address Formal Allegations of Discriminatory Harassment
- http://www.aub.edu.lb/provost/Academic-initiatives/Pages/TitleIX.aspx

The GMEC Policy against Discrimination and Harassment is published as protocol rather than policy and is available online at URL: http://www.aub.edu.lb/fm/gme/policies/Documents/4-dis_har.pdf
**Duty Hours**

Duty hours, although subject to modification and variation depending upon the clinical area to which the Resident is assigned and/or exigent circumstances, must be in accordance with ACGME-I requirements. The ACGME-I Foundational requirements on duty hours are as follows:

• Duty hours must be limited to 80 hours per week, averaged over a four-week period, inclusive of all in-house call activities.

• Moonlighting or extended hours are included in the 80-hour work-week.

• Residents must be provided with one day in seven free from all educational and clinical responsibilities, averaged over a four-week period, inclusive of in-house call.

• Adequate time for rest and personal activities must be provided. This should consist of a 10-hour time period provided between all daily duty periods and after in-house call.

• In-house call must occur no more frequently than every third night, averaged over a four-week period.

• Continuous on-site duty, including in-house call, must not exceed 24 consecutive hours. Residents may remain on duty for up to six additional hours to participate in didactic activities, transfer care of patients, conduct outpatient clinics, and maintain continuity of medical and surgical care. No new patients may be accepted after 24 hours of continuous duty.

• The frequency of at-home call is not subject to the every-third-night, or 24+6 limitation. However at-home call must not be so frequent as to preclude rest and reasonable personal time for each resident. Residents taking at-home call must be provided with one day in seven completely free from all educational and clinical responsibilities, averaged over a four-week period.

• When residents are called into the hospital from home, the hours residents spend in-house are counted toward the 80-hour limit.

All residents/fellows are required to honestly and accurately log their duty hours regularly via Myevaluations.com. Residents are required to immediately notify their attending physician if circumstances (i.e., patient emergency) may lead to violation of duty hour regulations. Residents are also required to immediately notify the Program Director, Chief Resident, and the Assistant Dean for Graduate Medical Education/DIO or report anonymously in the rotation evaluation their concerns or any serious violation of their standard duty hours. Residents exceeding maximum duty period lengths should document their justification on Myevaluations.com.
**Election of Chief residents**

All PGY5 senior residents of the same year will be nominated and all the attendings will vote for one chief resident. The nominated resident with the higher votes will be the chief resident of the year.

**Evaluation**

The Diagnostic Radiology Program, like all other programs, maintains an effective plan for assessing resident performance throughout the period of appointment, including during periods of service at affiliated institutions. Assessment includes competence in the below ACGME-I Core Competencies (patient care and procedural skills, medical knowledge, practice-based learning and improvement, interpersonal and communication skills, professionalism, and systems-based practice) in addition to program specific standards. Assessment include the use of assessment results, including but not limited to in-service or in-house examinations, review of case or procedure log, a review of case volume, and breadth and complexity of patient cases, review of evaluations by faculty, patients, peers, self, and other professional staff, to achieve progressive improvements in residents’ competence and performance. The Clinical Competence Committee shall review all resident evaluations, and make recommendations to the Program Director for resident progress including promotion, remediation, and dismissal.

**Fellowship and Residency Research Program (FRRP)**

The Fellowship and Residency Research Program (FRRP) is a required component of the GME training programs at the AUBFM & MC. The FRRP requires all residents and fellows to participate in a research project throughout their GME training at AUBMC. Its provides each categorical resident and fellow with one research experience, connects them with advisors which in turn allows them to develop long term professional relationships to finally develop a publication in a peer-reviewed journal.

Please check the FRRP website at URL:

http://www.aub.edu.lb/fm/medicalresearch/ClinicalandTranslationalResearch/FRRP/Pages/FRRPHome.aspx

**General Competencies for ACGME-I**
Residents are regularly evaluated on the six Accreditation Council for Graduate Medical Education International LLC (ACGME-I) Core Competencies where a satisfactory performance level on all six competencies is necessary for successful completion of each PGY Level. The ACGME Core Competencies are:

- **Patient Care**: Residents must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.
- **Medical Knowledge**: Residents must demonstrate knowledge about established and evolving biomedical, clinical, and cognate (e.g., epidemiological and social-behavioral) sciences and the application of that knowledge to patient care.
- **Practice-based Learning and Improvement**: Residents must be able to investigate and evaluate their patient care practices, appraise and assimilate scientific evidence, and improve their patient care practices.
- **Interpersonal and Communication Skills**: Residents must demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, their patients' families, and professional associates.
- **Professionalism**: Residents must clearly show a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population.
- **System-based Practice**: Residents must demonstrate an awareness of a responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value.

**Informed Consent for Suspected Pregnancy or Pregnant Patients**

The radiologist (radiology resident or attending) is to inform the patient of the risks vs. benefit with respect to radiation dose and pregnancy (at any stage). Additionally, the radiologists informing the patient shall also sign the informed consent after deemed appropriate (by the radiologist) before each radiological examination—irrespective if the patient is an inpatient, outpatient, first imaging presentation or multiple imaging presentation. Each time a radiological procedure is performed a new informed consent needs to be used.

**In-Training Exam**

The Diagnostic Radiology In-Training (DXIT™) examination is made available to higher learning institutions who teach diagnostic radiology, as a key tool in assisting program directors and participating residents in the academic mission. These examinations are valuable resources that offer residents an opportunity to self-evaluate their knowledge and to identify specific areas of deficiency relative to their nationwide peers at the same level of training. They also serve as useful tools for program directors to assess the effectiveness of their curriculum as benchmarked against other programs.
The examinations are given annually by the ACR in January. All residents have to sit for the exam and the grades of the exam will be used as a criteria for promotion.

**Leave of Absence**

Offers 5 weeks of Leave of absence divided as per the below: “Up to 4 weeks per academic year is permitted for time away from training, which includes vacation, illness, parental or family leave, or pregnancy-related disabilities. In addition to 1 week per year which involves Educational Leave, Pregnancy related disabilities, Fellowship interviews, FCR and USMLE Examination. Training must be extended to make up any absences exceeding the above mentioned 5 weeks per year of training.

**Maternity Leave**

Female residents will be entitled to eleven weeks (ten weeks Maternity Leave and 1 week Parental Leave) with full pay and benefits for an aggregate period preceding and immediately following delivery. In no case will such a resident be allowed to resume her work before five weeks from the date of delivery. A resident may with the approval of the Program Director and the Assistant Dean for Graduate Medical Education be granted an additional period of leave without pay with full benefits prior to and/or following delivery.

**On Call Policies**

The following On-Call rules apply on PGY2 to PGY5 levels:

- All PGY2s will not be reporting during the first two quarters of the year. In the third quarter, they will only be dictating X-rays after verifying and checking with PGY3, PGY4 or PGY5 residents. In the fourth quarter, they will be dictating CT after verifying and checking with PGY3, PGY4 or PGY5 residents.
- The night float rotation (From Sunday till Thursday, from 8:00 PM – 8:00 AM) will be covered by the PGY4 or PGY5 residents in the first 11 blocks. The last two blocks (Block 12 and Block 13) will be covered by PGY3, PGY4 or PGY5 residents.
- The 4 PM – 8 PM shift, the PGY4 or PGY5 residents will cover it during the first quarter of the year; subsequently the remaining of the year will be covered by PGY3, PGY4 or PGY5 residents.
- Weekends and holidays including Fridays from 4 PM-8 AM, Saturdays from 8 AM – 8 AM (the next day) and Sundays from 8 AM -8 PM, the calls will be covered by a senior resident of PGY4 or PGY5 during the first quarter of the year. The remaining of the year will be covered by a PGY3, PGY4 or PGY5 resident.
• All CT dictations up to 11:45 PM should be discussed with an attending before sending the preliminary report.

Prevention/Treatment/Management of Fatigue

It is probably inevitable there will be some sleep loss and fatigue in the course of medical training. However, it must be managed so it doesn't interfere with a resident/fellow well-being, education, patient care and safety. The prevention, treatment, and management of resident fatigue are therefore a shared responsibility of AUB GME Office, GME training program, faculty members, and residents.

Please check below the Residents’ Responsibilities:

• Driving Home: Post-call is a particular concern for the safety and well-being of residents. It takes 4 seconds to drive off the road and have a motor vehicle collision. Four-second "micro sleeps" are common in sleepy residents. Residents may want to consider nap before driving home or living close enough that they don't have a long drive post-call.

• Recognize Vulnerability and Symptoms in Residents and Colleagues: Although there is individual variation, most adults need ~ 8 hours of sleep per night. The impact of too little sleep is cumulative. People typically under-estimate their degree of sleepiness. So as with alcohol, by the time you think you're sleepy you're probably profoundly affected. Your performance level will fall especially with tasks that require a great deal of attention. Even if you feel you're not at risk, consider that your colleagues may be. Watch out for your fellow residents.

• It Is Not Normal to Fall Asleep in a Lecture: If it is a boring lecture, noted author Dinges says, "You'll be awake and annoyed but not asleep." If you are nodding off or falling asleep this is a major symptom that you're too fatigued. You're experiencing "microsleep." Therefore you can more easily make poor judgments medically and/or sustain a motor vehicle collision when you're driving home post-call.

• Residents must set priorities for “time off”: Residents should be careful stewards of their time. There is a temptation to cram way too much into the hours free from responsibilities. During off hour pursuits include time for professional reading, family and friends, hobbies, and spiritual and community connections. Although all these are important, protect your recovery time.

• Moonlighting: Both internal moonlighting and external moonlighting count in duty hour limits. For programs which allow moonlighting, program directors will need to have a way to know when, how frequently and for what duration external moonlighting is occurring. Residents and program directors need to carefully evaluate moonlighting opportunities so as not to compromise their limited time to obtain rest missed as a part of residency training. Nighttime moonlighting in particular may not be appropriate given its likely contribution to sleep debt.

• Report duty hours honestly: The GME training programs require residents to report duty hours through Myevaluations.com. Please be honest. Your Program and AUBMC need to know where there are potential issues, patient volume or acuity that may keep you here over hours. This documentation is necessary to advocate for additional resources to help all of us care optimally for patients.
Probation System

The residents will be put on probation:
- If they score a yearly cumulative average between 60%-70%
- 2 consecutive written warnings
- Serious misconduct problems.
- The probation period will be for three months, and the resident ceases to be on probation if he/she shows corrective measures and actions.

Procedures Log

- The interventions done in Mammography, the fluoroscopy procedures, the ultrasound interventions and the whole procedures done during the IR rotation shall be inserted in the procedure log book ADS.
- The ultrasound and CT procedures shall be guided.

Promotion System

- To get promoted/graduated the residents should score a yearly cumulative average of ≥70%.
- Residents who score a yearly cumulative average of <60% will have to repeat the year.

A resident gets promoted to an upper level as per the following grade dissection:
- 25% of cumulative grade → ACR in-training exam
- 20% of cumulative grade → Attending-based Evaluation
- 20% of cumulative grade → Conference attendance
- 10% of cumulative grade → Conference lecture evaluations
- 5% of cumulative grade → FRRP
- 10% of cumulative grade → Rad-Primer monthly exam
- 10% of cumulative average → Completion of all evaluation and procedure log books
RadPrimer

Rad-Primer is a software that tests the knowledge of the residents by the end of each rotation. The tests will be related to their rotations in the block and the difficulty is based on the different PGYs.

Required Number of Supervised and Independent Procedures

Residents can’t perform independently any procedure on their first day of their training.

Procedures that the residents are required to independently perform prior to graduation are listed below and they meet the ACGME-I Diagnostic Radiology Requirement (II.G.7.) that states “residents must have documented supervised experience in interventional procedures, which includes image-guided biopsies and drainage procedures.”

<table>
<thead>
<tr>
<th>Procedure/Operation</th>
<th>Min. required No. of supervised procedures before she/he can perform the procedure independently</th>
<th>Min. required No. of independently performed procedures prior to graduation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biopsies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lung</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Liver &amp; abdominal organs</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Bone</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Soft Tissue</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Drainages</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pleural</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Peritoneal</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Abscess/Fluid Collection</td>
<td>10</td>
<td>5</td>
</tr>
</tbody>
</table>

There are procedures mentioned in the ACGME-I Diagnostic Radiology requirements that are not included in of Diagnostic Radiology’s list of required procedures like participating in at least 3 therapies involving oral administration of I-131, and having documented supervised experience in interventional procedures like angioplasty, embolization and infusion procedures and other percutaneous-interventional procedures…
Residents Services

The Diagnostic Radiology Program Director and Coordinator offer the below services for the residents/fellows:

- address residents'/fellows' concerns or interests within the departments, institution or affiliated sites
- Have an open-door policy where residents/fellows can meet with the Program Director or Program Coordinator to discuss or ask help on any issue and confidentiality is assured.
- Advise residents’/fellows’ on Diagnostic Radiology Department policies.

Radiology Orientation Session

The academic year for all house-staff starts in the middle of June. The Diagnostic Radiology Department orientation sessions are usually provided one week before the beginning of each academic year. The orientation sessions are required from each new resident/fellow at the American University of Beirut Faculty of Medicine and Medical Center. Residents/fellows are not allowed to start their training without completing the orientation process.

Resuscitative Training

Residents with patient care contact at AUBMC are required to acquire and maintain life support certification(s) as required by the ACGME-I advanced specialty program requirements and the AUBMC policy on resuscitative training. All new residents and fellows are required to obtain certification in resuscitative training within their first 6 months of employment.

In addition to the Basic Life Support (BLS) certification that all residents are required to be certified in, Diagnostic Radiology residents are required to acquire certification in the below course(s):

<table>
<thead>
<tr>
<th>Resident Staff</th>
<th>Resuscitative Training Course(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Residents/Fellows</td>
<td>BLS</td>
</tr>
<tr>
<td>Diagnostic Radiology Residents/Fellows</td>
<td>ACLS and PALS</td>
</tr>
</tbody>
</table>
Sick Leaves

Concerning the sick leaves, all residents should submit the sick leave report to the program coordinator between 24-48 hours after receiving it; otherwise it will be taken from the vacation days.

Supervision

Faculty members are expected to provide an appropriate level of clinical supervision required of all residents during clinically relevant educational activities. The GMEC subscribes to a philosophy that the most effective learning environment for post-graduate medical trainees is one that provides:

(a) Sufficient freedom and graded responsibility for residents to share responsibility for decision-making in patient care under adequate faculty supervision,

(b) Supervising faculty feedback to residents concerning their diagnostic and management decisions, and

(c) An appropriate balance of education with the patient’s right to expect a healthy, alert, responsible, and responsive physician dedicated to delivering effective and appropriate care. As per the Diagnostic Radiology Program’s supervision policy and procedures, supervision can be:

- Direct supervision: where the supervising physician is physically present with the resident and patient.
- Indirect Supervision with direct supervision immediately available: where the supervising physician is physically within the confines of the site of patient care, and is immediately available to provide Direct Supervision.
- Oversight: where the supervising physician is available to provide review of procedures/encounters with feedback provided after care is delivered.

Suspension and Dismissal System

The residents will be suspended for 1 week if they:

- Seriously violate the resident agreement and the rules, laws and policies of AUBMC, GMEC and ACGME-I.
- Show misconducts and performance problems

The residents will be suspended for 2 weeks if they:

- Show recurring administrative lapses such as the violations of medical reports requirements on IR rotations.
Most serious violations of the resident agreement and misconduct problems will lead to a dismissal from the program according to GMEC probation rule.

**Telephone Service**

Telephones for internal use on campus are located at each gate and in most public locations and on call rooms. Please check below the important extension numbers inside AUB:

<table>
<thead>
<tr>
<th>Inside AUB</th>
<th>AUB Extension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambulance (24 hours a day)</td>
<td>7777</td>
</tr>
<tr>
<td>Environmental Health and Safety Center (working hours)</td>
<td>2360</td>
</tr>
<tr>
<td>Fire (24 hours a day)</td>
<td>5555</td>
</tr>
<tr>
<td>Plant Engineering (24 hours a day)</td>
<td>6510</td>
</tr>
<tr>
<td>Security Office (Protection)</td>
<td>2400</td>
</tr>
<tr>
<td>Housekeeping</td>
<td>6357</td>
</tr>
<tr>
<td>Emergency Room</td>
<td>6617/8</td>
</tr>
<tr>
<td>UHS (infirmary)</td>
<td>3000</td>
</tr>
<tr>
<td>Counseling Center</td>
<td>3178, 3196</td>
</tr>
<tr>
<td>AUB Telephone Information</td>
<td>5010</td>
</tr>
<tr>
<td>Paging Operating</td>
<td>8989/8999</td>
</tr>
<tr>
<td>Medical Dean’s Office</td>
<td>4700</td>
</tr>
<tr>
<td>Associate Dean for Medical Education</td>
<td>4868</td>
</tr>
<tr>
<td>GME Office</td>
<td>4526/4706/4758</td>
</tr>
<tr>
<td>Chief of Staff</td>
<td>5996</td>
</tr>
<tr>
<td>IT helpdesk</td>
<td>2260</td>
</tr>
<tr>
<td>Saab Medical Library</td>
<td>5900/5911</td>
</tr>
</tbody>
</table>
Warnings

1. Verbal warnings will be given to:
   - The residents who have a grade average between 80%-90% on morning lectures attendance for three months.
   - The residents who fail to complete their procedure log book by the end of the rotation. (1st warning will be verbal and the 2nd will be written to be put in the permanent file)
2. Written warnings will be given to:
   - The residents who have a grade average lower than 80% on morning lectures attendance for three months.
   - Two verbal warnings will lead to one written warning.
3. Two written warnings will lead to suspension from the program for three days.