

**NAME OF ROTATION:**  
**Genitourinary Radiology**

**DIRECTOR OF ROTATION:**  
**Vivian Miller, M.D.**

**OVERVIEW:**

The GU rotations are designed to provide the first and second year residents with extensive training in contrast studies of the GU System. These rotations will be supplemented by extensive experience in GU radiology during the CT, Ultrasound and Pediatric rotations as well as some exposure during Nuclear Medicine, MRI and Vascular and Interventional Radiology rotations. This training will be supplemented by a lecture series in GU radiology as well as reading of the GU radiology literature.

The resident is expected to be available in the GU reading areas from 7:30 a.m. until 5:00 p.m. The resident will manage, with supervision, all contrast enhanced GU procedures.

**GOALS AND OBJECTIVES:**

The overall goal of these rotations is to train the resident sufficiently to be able to function competently and independently in the performance and interpretation of all GU Radiology imaging including GU interventional procedures.

**GU Radiology Rotation I**

**During this rotation, the resident will:**

1. Review the ACR Standards and department policies and protocols pertinent to GU radiology and the administration of intravenous contrast.
2. Discuss the pharmacology of ionic and non-ionic contrast.
3. Identify the clinical and radiographic indications for GU contrast studies.
4. List the indications and contraindications to the administration of intravenous contrast material.
5. Recognize and treat contrast reactions.
6. Demonstrate the correct technique for intravenous injection of contrast material and catheterization necessary for performance of VCUG studies.
7. Observe the performance of technical procedures by the technologists.
8. Identify normal anatomy, normal variants and common pathologic conditions, especially those which require emergent treatment.
9. Review the ACR GU radiology teaching file on both film and CD-ROM.
10. Read texts recommended on the comprehensive reading list.

### GU Radiology Rotation II

#### During this rotation, the resident will:

1. Demonstrate proficiency in the interpretation of GU contrast studies, including retrograde urethrography and loopograms.
2. Read references # 1 and # 6 on the comprehensive reading list.
3. Contribute two cases to the GU radiology teaching file.
4. Prepare and present one GU basic science lecture.

### GU Radiology Rotation III

#### During this rotation, the resident will:

1. Manage, with supervision, all aspects of GU contrast procedures.
2. The ACR syllabi are recommended reading (Volume 43).
3. Contribute two cases to the GU radiology teaching file.
4. Perform competently as a consultant to urologists and other clinicians.
5. Teach basic procedures and interpretation of GU studies to junior residents.

#### EVALUATION:

The Service Director will meet with the resident at the beginning of each rotation to discuss the goals and objectives of the rotation and at the end of the rotation to discuss the resident's performance relative to the stated goals and objectives. The Service Director will complete a standard written evaluation form for the resident at the end of each rotation. This written evaluation will be sent to the program director for use in compiling the resident's semi-annual overall evaluation. The evaluation will be discussed with the resident at the end of the rotation by the Service Director and an opportunity for resident feedback and rotation evaluation will be provided.

#### COMPREHENSIVE READING LIST:

1. N. Reed Dunnick, Textbook of Uroradiology, Williams & Wilkins 2<sup>nd</sup> Edition, 1997  
or Z.L. Barbaric, Principles of Genitourinary Radiology, Thieme Medical Publishers, Inc., NY.
2. Pollack - Clinical Urography
3. GU section (pp. 769-827) of Fundamentals of Diagnostic Radiology, 2<sup>nd</sup> Edition, Brant and Helms, Lippincott, Williams & Wilkins, 1999
4. ACR Syllabi, Volume 43-GU Disease 1998, and Volume 33, GU, 1992

COMPREHENSIVE READING LIST:

5. Friedland et al - Uroradiology: An Integrated Approach
6. Yoder, Hysterosalpingography and Pelvic Ultrasound: Imaging in Infertility and Gynecology, Little Brown and Co., November 1988.
7. Ott, Favez, Zagoria, Hysterosalpingography: A Text and Atlas, Lippincott, Williams & Wilkins, July 1998
8. Zoran L. Barbara, Principles of Genitourinary Radiology, Thieme Medical Publishers Inc., NY

GU RADIOLOGY LECTURE SERIES:

1. Contrast Reactions: Diagnosis and Treatment
2. Techniques of Intravenous Pyelography
3. Techniques of VCUG
4. Pediatric GU Procedures: Special Considerations
5. GU Trauma
6. Normal Physiology and Anatomy of the Urinary Tract
7. Embryology and Congenital Malformations of the Urinary Tract
8. Pharmacology of Contrast Agents
9. Hysterosalpingography/Sonohysterography
10. Ultrasound Evaluation of the Prostate and Scrotum
11. Ultrasound Evaluation of the Kidneys, Ureters and Bladder
12. GU Nuclear Medicine Studies
13. Nuclear Medicine Evaluation of Renal Transplants
14. Renal and Adrenal Angiography/Renovascular Disorders

GU RADIOLOGY LECTURE SERIES: (cont'd)

15. GU Interventional Radiology Non Vascular Renal Intervention
16. Uterine Artery Embolization
17. Fallopian Tube Recanalization
18. CT Evaluation of the Retroperitoneum
19. MRI of the GU Tract
20. Renal Cystic Disease/Renal Neoplasms
21. Pediatric Renal and Adrenal Pathology
22. Imaging Evaluation of Renal Transplants
23. Obstructive Uropathy in the Newborn
24. Inflammatory & Infectious Diseases of the Kidney
25. Evaluation of GYN Malignancies/and other Pathology
26. Obstetrical Ultrasound: I, II, III