ANATOMY LEARNING OBJECTIVES

Preamble

Anatomy is basic to General Surgery. The Anatomy rotation allows the General Surgery resident the opportunity to review in-depth the areas of anatomy relevant to the practice of General Surgery. The Anatomy rotation includes a four week program of cadaver dissection at the Anatomy Laboratory located in the Department of Anatomy (Basic Medical Sciences Building). The resident must report to the main office in the Department of Anatomy on the first day of the rotation for instructions and cadaver assignment.

General Objectives

Upon completion of the Anatomy rotation, the General Surgery resident is expected to:

- Demonstrate knowledge in anatomy pertinent to General Surgery
- Demonstrate knowledge of developmental anatomy pertinent to General Surgery
- Develop tissue-handling/dissecting skills
- Appreciate and respect the contribution of the deceased to the education of the living

Specific Objectives

At the completion of the Anatomy rotation, the General Surgery resident will have acquired the following competencies and will function effectively as:

**Medical Expert**

- Establish and maintain knowledge, skills and attitudes appropriate to the Anatomy rotation
  - Apply knowledge of the fundamental biomedical sciences relevant to the Anatomy rotation

The resident in General Surgery is required to attain sufficient knowledge as follows:

**Neck Anatomy**

- Embryogenesis
- Topographic anatomy, including:
  - Triangles of the neck
- Vascular supply
- Lymphatics/lymph nodes
- Nerves
- Specific Organs, including:
  - Thyroid gland
  - Parathyroid glands
  - Parotid gland
  - Trachea in the neck

**Thoracic Anatomy**

- Embryogenesis
- Thoracic wall
- Pleurae
- Pulmonary anatomy
- Mediastinum, including:
  - Anatomic subdivisions/contents, including:
    - Thymus
    - Esophagus
    - Thoracic duct
    - Nerves
    - Lymphatics/lymph nodes
    - Pericardium/heart/great vessels

**Breast and Axilla**

- Embryogenesis
- Breast anatomy
- Axillary anatomy, including:
  - Vascular anatomy
  - Lymphatics/lymph node levels
  - Brachial plexus and individual nerves
Diaphragm
- Embryogenesis
- Central tendon
- Esophageal hiatus/abdominal esophagus

Abdominal Anatomy
- Embryogenesis
- Abdominal wall and groin, including:
  - Inguinofemoral area
  - Posterior (lumbar) abdominal wall
- Peritoneum and omentum
- Retroperitoneum, including:
  - Compartments of the retroperitoneal space
  - Communication of the retroperitoneal spaces
  - Abdominal aorta and its branches
  - Inferior vena cava and its branches
  - Nerves
  - Lymphatics/lymph nodes
- Great vessels in the abdomen
- Abdominal organs, including:
  - Stomach
  - Small intestine
  - Appendix
  - Large intestine and anorectum
  - Liver
  - Extrahepatic biliary tract and gallbladder
  - Pancreas
  - Spleen
  - Kidneys and ureters (general knowledge)
  - Adrenal glands (general knowledge)
  - Urinary bladder (general knowledge)
  - Male genital system (general knowledge)
  - Female genital system (general knowledge)

Pelvis and Perineum
- Pelvic sidewall, including:
  - Soft tissues
  - Vascular anatomy
  - Nerves
- Pelvic floor
- Perineum, including:
  - Boundaries
  - Subdivisions
  - Anal triangle

Upper Extremity
- Blood vessels of the antecubital fossa
- Demonstrate proficient use of procedural skills

Having completed the Anatomy rotation, the General Surgery resident will be able to demonstrate knowledge and technical competence in performing the following procedures:
- Unilateral in-depth neck dissection in the cadaver
- In-depth dissection of the thorax in the cadaver
- In-depth dissection of the abdomen and pelvis in the cadaver
- Unilateral in-depth dissection of the groin in the cadaver
- In-depth dissection of the perineum in the cadaver
- Superficial dissection of the blood vessels of the antecubital fossa in the cadaver
- Unilateral in-depth dissection of the axilla in the cadaver

The General Surgery resident must follow the dissection manual and the dissection timetable available from the Surgical Education Office to complete the above technical objectives efficiently

Educational Strategies

The General Surgery resident will achieve the above objectives by means of the following:
- Self-directed learning using facilities for dissection and self-study aids such as audiovisual presentations, plastic models, prosected materials and selected readings from anatomy textbooks and the dissection manual available from the Surgical Education Office
Evaluation Strategies

The General Surgery resident will be assessed with respect to the above objectives by means of the following:

- Formal oral examinations in anatomy administered by Anatomy faculty
- In-training evaluation by Anatomy faculty

Scholar

At the completion of the Anatomy rotation, the General Surgery resident will be able to:

- Maintain and enhance professional activities through ongoing learning
  - Integrate new learning into development as a general surgeon

Professional

At the completion of the Anatomy rotation, the General Surgery resident will be able to:

- Demonstrate an understanding of the contribution of the deceased to the education of the living
  - Exhibit appropriate professional behaviors, including compassion, and respect for the dignity of the deceased