

**ROTATION LIAISON:**

**TRAUMA SURGERY**

**INSTITUTION:**

Dr. Michal Cheatham

**LEVEL(S):**

Orlando Regional Health

PGY-4

## **I. GENERAL INFORMATION**

The General Surgery Department at Orlando Regional Health has three full time staff surgeons specializing in trauma and critical care. In keeping with the educational philosophy of the Surgical Department, we would like the residents to obtain a broad, in-depth experience in the treatment of trauma patients. The expectations will be that the resident will be involved in the total care of patients they see on the trauma service.

## **II. Goals & Objectives**

### **PGY-1**

#### ***Knowledge***

- Understand the principles of primary acute trauma management: ABC's, etc.
- Understand the principles of angio access
- Importance of basic blood tests
- Understand the principles of secondary acute trauma
- Management: detailed physical exam appropriate workup, notify necessary specialists

#### ***Skills***

- ATLS protocol
- ACLS protocol
- Simple suture technique
- Insertion of CVL
- Nasogastric and orogastric tube insertion
- Tube thoracostomy
- Stabilizing skeletal injuries
- Intubation of the trachea

### **PGY-2-3 Resident**

#### ***Knowledge***

- Coordinating acute trauma care (running a trauma code)
- Identify need for:
  - ✓ Immediate airway management
  - ✓ Immediate chest tube insertion
  - ✓ Immediate rx of tension pneumothorax
  - ✓ Emergency department thoracotomy
  - ✓ Acute surgical intervention
  - ✓ Immediate neurosurgical intervention
  - ✓ Immediate intervention for rx of spinal cord injury
  - ✓ Immediate neck exploration or diagnostic workup
- Understand the principles of a trauma system
- Differentiating levels of care i.e. Level I, II, III, IV
- Understand interdisciplinary care: scene to discharge
- Principles of rehabilitation
- Understand the epidemiology of trauma and its economical impact on health care

## Skills

- Attain airway control
- Cricothyroidotomy
- Cardiac echo
- Abdominal ultrasound
- Diagnostic peritoneal lavage
- Subxiphoid window for cardiac injury
- Laparoscopy
- Critically assess the trauma literature
- Use of the trauma registry for data analysis
- Leadership i.e. running a trauma service
- Educating students and junior residents
- Interaction with consultants

## ACGME Core Competencies

- 1. Patient Care that is compassionate, appropriate, and effective for the treatment of health programs and the promotion of health.** Surgical residents must:
  - a. Demonstrate manual dexterity appropriate for their training level.
  - b. Be able to develop and execute patient care plans appropriate for the residents' level.
- 2. Medical Knowledge about established and evolving biomedical, clinical, and cognate (e.g., epidemiological and social-behavioral) sciences, as well as the application of knowledge to patient care.** Surgical residents are expected to critically evaluate and demonstrate knowledge of pertinent scientific information.
- 3. Practice-based learning and improvement that involves the investigation and evaluation of care for their patients, the appraisal and assimilation of scientific evidence, and improvements in patient care.** Surgical residents are expected to :
  - a. Critique personal practice outcomes.
  - b. Demonstrate recognition of the importance of lifelong learning in surgical practice.
- 4. Interpersonal and communication skills that results in the effective exchange of information and collaboration with patients, their families, and other health professionals.** Surgical residents are expected to:
  - a. Communicate effectively with other health care professional.
  - b. Counsel and educate patients and families.
  - c. Effectively document practice activities.
- 5. Professionalism, as manifested through a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to patients of diverse backgrounds.** Surgical residents are expected to:
  - a. Maintain high standards of ethical behavior.
  - b. Demonstrate a commitment to continuity of patient care.
  - c. Demonstrate sensitivity to age, gender and culture of patients and other health care professionals.
- 6. Systems-based practice, as manifested by actions that demonstrate an awareness of and responsiveness to the large context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care.** Surgical residents are expected to:
  - a. Practice high quality, cost effective patient care.
  - b. Demonstrate knowledge of risk-benefit analysis.

- c. Demonstrate an understanding of the role of different specialists and other health care professionals in overall patient management.

### **III. EXPECTATIONS**

The junior resident evaluates all patients admitted to the team, obtaining a complete history, performing a complete physical examination, and formulating a preliminary plan for evaluation and treatment. The junior resident then discusses the patient with the senior resident who confirms the history and physical findings personally. Initial evaluation and treatment is instituted at this time. The senior resident presents the patient to the staff surgeon directly responsible for the patient and final diagnosis and treatment are established and affected.

The Chief or fourth year resident is responsible for the organization and function of the Team. The senior and Chief Resident work cooperatively and closely in patient management.

### **IV. EVALUATIONS**

A computerized evaluation will be completed by the faculty at the end of each rotation. Additionally, you are required to submit your evaluation of the rotation and faculty to the residency director.

- V. CONTACTS-** Dr. Michael Cheatham  
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## **SCORE CURRICULUM COMPONENTS**

### **CATEGORY 17: TRAUMA**

#### **DISEASES/CONDITIONS**

##### **BROAD**

- Blunt trauma
- Penetrating trauma
- Neck injuries
- Vascular
- Trachea/Larynx
  - Pharynx/esophagus
  - Nerve
- Chest injuries
  - Rib fractures
  - Sternal fractures
  - Flail chest
  - Pneumothorax
  - Hemothorax
- Pulmonary contusion
- Pulmonary laceration
  - Myocardial contusion
  - Cardiac tamponade

- Esophageal injury
- Abdominal injuries
  - Diaphragm
  - Spleen
  - Liver
  - Stomach
  - Duodenum
  - Pancreas
  - Small intestine
  - Colon and rectum
- Retroperitoneal injuries
  - Retroperitoneal hematoma
  - Pelvic fractures
  - Renal injuries
  - Bladder injuries
  - Ureteral injuries
- Vascular injuries
  - Head/neck
  - Thorax
  - Abdomen
  - Extremity
- Pediatric trauma
- Geriatric trauma
- Trauma in pregnancy

#### **FOCUSED**

- Head injury
  - Closed
  - Penetrating
- Tracheobronchial injuries
- Aortic Injuries
- Urethral injuries
- Orthopedic and spinal injuries
  - Spine fracture
  - Pelvic fracture
  - Extremity fractures
  - Dislocations
  - Sprains and strains
  - Mangle and traumatic amputation
- Envenomation
  - Snakes and lizards
  - Spiders
  - Hymenoptera
  - Scorpions
- Animal and human bites
- Environmental injuries
  - Hypothermia
  - Frostbite
- Burns
  - Flame burns

- Scald burns
- Electrical burns
- Chemical burns
- Inhalation injury
- Carbon monoxide poisoning

## **OPERATIONS/PROCEDURES**

### **ESSENTIAL – UNCOMMON**

- Management of esophageal trauma
- Management of gastric trauma
- Management of duodenal trauma
- Management of small bowel trauma
- Management of colon trauma
- Neck exploration for trauma
- Exploratory thoracotomy – open
- Exploratory laparotomy – open
- Exploratory laparotomy – laparoscopic
- Splenectomy/splenorrhaphy
- Repair hepatic lacerations
- Drainage pancreatic injury
- Debride/suture major wounds
- Repair/resection for kidney trauma
- Repair ureteral injury
- Repair bladder injury
- Repair of carotid artery injury
- Repair of abdominal aorta or vena cava injury
- Repair peripheral vessels
- Fasciotomy for injury
- Repair cardiac injury

### **COMPLEX**

- Burn debridement or grafting
- Placement of intracranial pressure monitor
- Reduction and stabilization of maxillofacial fracture
- Repair of tendon or nerve
- Hepatic resection for injury
- Resection for pancreatic injury
- Closed reduction of fracture
- Open reduction of open/closed fracture
- Debridement and reduction of open fracture
- Repair of thoracic aorta, innominate, subclavian injury