INTERN YEAR

Interns will rotate for one month each on Anesthesiology, Emergency Medicine, Neurosurgery, Otolaryngology, Pediatric Surgery, Plastic Surgery, SICU, and Trauma. Three months will be spent on other General Surgery services. One additional month will be spent on Otolaryngology doing research didactics. Designed to prepare residents for specialty education in Otolaryngology – Head and Neck Surgery, clinical and didactic activities in the intern year will allow them to develop the knowledge and skills needed to assess, plan, and initiate treatment of adult and pediatric patients with surgical and/or medical problems; to demonstrate the ability to care for patients of all ages with surgical and medical emergencies, multiple organ system trauma, soft tissue wounds, nervous system injuries and diseases, and peripheral vascular and thoracic injuries; to demonstrate the ability to care for critically ill surgical and medical patients in the intensive care unit and emergency room settings; to participate in the pre-, intra-, and post-operative care of surgical patients; and to understand surgical anesthesia in hospital and ambulatory care settings, including anesthetic risks and the management of intra-operative anesthetic complications.

Didactic teaching during the intern year is both formal and informal. The latter is structured around patients' outpatient and surgical visits and floor consults. R1 residents will attend all mandatory Otolaryngology didactic activities and will participate in Otolaryngology Grand Rounds at least monthly. All other didactic activities will be organized by the services on which they are rotating. In all cases, R1 residents are expected to be prepared for didactic activities and to actively participate.

The R1 resident will be assigned an Otolaryngology resident mentor that will meet the R1 on a quarterly basis. Any issues, questions, or concerns can be raised within the relationship to attempt to identify and resolve any problems early.

In addition to the basic information included below for each rotation, R1 residents are expected to meet all other requirements presented to them at the start of their time on these services. The attitude and willingness to learn that are demonstrated by the R1 is a direct reflection of the Otolaryngology program, and so s/he is expected to be prepared, enthusiastic, and a willing member of the health care team.

R1 – Overall Goals and Objectives

The R1, under appropriate supervision from the attending staff, learns the accepted sequence for evaluating a patient's chief complaint, to judge the patient's ability to tolerate surgical intervention, and to understand all phases of patient care as they relate to the operating room. The first year resident also learns the postoperative management of surgical patients, and the diagnosis and management of patients with surgical problems presenting to the outpatient clinic and emergency department. In addition, the first year resident is expected to study and incorporate elements of the Core Clinical Competencies (Interpersonal Skills and Communication, Professionalism, Systems-Based practice and Practice-Based Learning and Improvement) into his or her practice on a longitudinal basis.

This includes the ability to:

1. Make sound ethical and legal judgments
2. Respect the cultural and religious needs of patients and their families, and provide surgical care in accordance with those needs
3. Use critical thinking when making decisions affecting the life of a patient
4. Collaborate effectively with colleagues and other health professionals
5. Teach and share knowledge with colleagues, residents, students, and other health care providers
6. Teach patients and their families about the patient's health needs
7. Be committed to scholarly pursuits through the conduct and evaluation of research
8. Be prepared to manage complex programs and organizations
9. Provide cost-effective care to surgical patients and families within the community
10. Value lifelong learning as a necessary prerequisite to maintaining surgical knowledge and skill.

Anesthesiology Rotation

The main goal of this rotation is to provide the R1 an organized experience to enable him/her to acquire the basic knowledge and skills in preoperative care including preanesthetic evaluation, anesthetic risk assessment, airway evaluation and immediate postoperative care.

At the completion of this rotation the R1 resident should be knowledgeable in the following areas and be able to:

1. Demonstrate knowledge of basic laryngeal anatomy and physiology.
2. Know the appropriate indications for general vs local anesthesia.
3. Perform an appropriate preoperative evaluation including when to order a pre-operative chest x-ray, EKG, and laboratory tests based on the patient's age, past medical history and social habits.
4. Write pre-anesthetic orders
5. Obtain oropharyngeal control of airway and provide Ambu ventilation
6. Perform orotracheal intubation, nasotracheal intubation, laryngeal mask ventilation and jet ventilation
7. Interpret the anesthesia record
8. Position the patient properly for operative exposure, temperature control, and protection from pressure/traction.
9. Demonstrate familiarity with intraoperative monitoring.
10. Insert arterial and venous lines.
11. Know the dose range and complications (including pulmonary edema and malignant hyperthermia) of barbiturates, local anesthetics, paralyzing agents, reversing agents, and inhalant anesthetics
12. Know when and how to use epinephrine and hyaluronidase in local anesthesia
13. Under supervision, administer a local block and general anesthesia
14. Understand and use conscious sedation

Emergency Medicine Rotation

The main goal of this rotation is to provide the R1 resident an organized experience to enable him/her to acquire the basic knowledge and skills in the evaluation and management of patients

presenting to the emergency room with emphasis on patients presenting with head and neck complaints. The R1 resident should also gain a better appreciation of medical conditions often seen as co-morbidities in head and neck patients including, diabetes mellitus, hypertension, stroke, congestive heart disease, respiratory distress and myocardial infarction.

At the completion of this rotation the R1 resident should be knowledgeable in the following areas and be able to:

1. Conduct primary assessment and take appropriate steps to stabilize and treat patients with trauma (penetrating and blunt), respiratory distress, congestive heart failure, metabolic imbalances, myocardial infarction, and chronic pain.
2. Establish the acuity level of patients in the ER, establish priorities and define the tasks necessary to manage the patients successfully.
3. Monitor, observe, manage, and maintain the stability of one or more patients who are at different stages in their work-ups including fundamental lab tests and radiological studies.
4. Recognize and initiate treatment for an acute anaphylactic reaction.
5. Collaborate with physicians and other professionals to evaluate and treat patients, arrange appropriate placement and transfer if necessary, formulate a follow-up plan, and communicate effectively with patients, family, and involved health care members.
6. Perform closure of simple and complex lacerations.
7. Demonstrate beginning familiarity with disaster management.

General Surgery Rotations

The main goal of this rotation is to provide the R1 resident an organized experience to enable him/her to acquire the basic knowledge and skills in the evaluation and management of patients presenting with general surgical complaints.

By the completion of intern year, the resident should be knowledgeable in the following areas and be able to:

1. Demonstrate skills in history and physical examination, documentation
    a. Obtain a detailed surgical history and obtain and review relevant medical records and reports
    b. Perform a detailed physical examination.
    c. Develop a complete differential diagnosis.
    d. Maintain a personal patient log.
    e. Write a succinct H&P, including a risk assessment evaluation.
    f. Obtain a written informed consent.
    g. Document the treatment plan in the medical record, including the indications for treatment.
    h. Dictate an operative note and discharge summary.
2. Demonstrate skills in patient assessment and perioperative management
    a. Order and interpret basic laboratory tests and screening X-Rays, and evaluate the patient's cardiac, pulmonary, renal, and neurological status.
    b. Develop a preoperative assessment of risk factors.
    c. Review, prioritize, and order medications the patient is currently taking, as appropriate.

    d. Use and understand the nursing notes and patient data.
    e. Prescribe activity level, management of medications, pain management, follow up appointments, and obtain urgent contact information.
3. Demonstrate skills in assessment of basic diagnostic tests and x-rays
    a. Recognize abnormalities in basic radiologic and laboratory tests and learn normal values and ranges.
    b. Choose the optimal imaging technique.
    c. Recognize pleural effusion on CXR, chest mass on CXR, pneumonitis on CXR, bowel gas patterns on flat plate abdomen, diaphragm abnormalities on CXR, spinal column fractures, and cervical spine radiographs
    d. Interpret basic EKG findings
    e. Recognize ischemia & arrhythmia patterns on EKG
    f. Management of Fluid/Electrolyte and Acid Base Balance
    g. Understand acid-base balance and the applications of body composition to fluid, electrolyte, and acid-base balance in health and disease.
    h. Give fluid resuscitation, manage postoperative fluid requirements, and recognize and correctly manage acid-base disorders.
    i. Make adjustments in fluid administration for comorbid conditions, e.g. renal or cardiac insufficiency, diabetes, hypovolemia.
    j. Use CVP and urine flow rates for adjustments of fluid administration.
    k. Perform a saphenous cutdown.
    l. Recognize and treat calcium and magnesium imbalance.
4. Demonstrate skills in management of fever, microbiology, and surgical infection
    a. Know the mediators of fever, differential diagnosis, evaluation and management of the febrile patient in order to initiate appropriate workup of fever and provide supportive treatment.
    b. Initiate definitive treatment with appropriate antibiotics.
    c. Be able to monitor antibiotic levels and recognize drug-related complications. Know the antibiotic of choice.
    d. Know and apply the principles of prevention of nosocomial infections, sterile technique and universal precautions.
    e. Order and interpret the appropriate imaging studies for localization of an infected focus.
    f. Know and apply the principles of incision and drainage.
    g. Know the proper use of prophylactic antibiotics.
    h. Know the classification of wounds (clean, clean-contaminated, contaminated, and infected).
    i. Recognize the septic syndrome and initiate appropriate supportive treatment. Be familiar with the current literature concerning the causes and mediators of the sepsis syndrome and its pathophysiology.
5. Demonstrate skills in epidemiology and public health
    a. Be knowledgeable in AIDS diagnosis and prevention of HIV infection.
    b. Understand the epidemiology and treatment of sexually transmitted diseases and other communicable diseases.
6. Demonstrate skills in nutrition
    a. Perform a metabolic assessment of the surgical patient.

b. Understand the metabolic implications of trauma and operation.
c. Know the indications for nutritional support of the surgical patient.
d. Know the methods of calculation of nutritional requirements in health and disease using the Harris-Benedict or similar formulae.
e. Know the composition of various enteral and parenteral formulas and adjust appropriately.
f. Calculate and order basic enteral or parenteral formulas.
g. Recognize complications of enteral and parenteral feedings.
h. Manage central IV lines.
i. Manage gastrostomy or jejunostomy feeding tubes.
j. Assess when a postoperative patient can be fed and assess adequacy of intake.
k. Know and utilize comparative costs of nutritional support methods.

7. Demonstrate skills in perioperative preparation
    a. Complete, document, and assess appropriate workup, write preoperative orders, and obtain required consultation from other specialists.
8. Demonstrate surgical skills
    a. Learn surgical site positioning, preparation and draping.
    b. Perform as first assistant. Know how to obtain hemostasis of small vessels and exposure of the operative field.
    c. Be familiar with common surgical instruments (scalpel, forceps, scissors, needle holders, hemostats, retractors, electrocautery) and suture materials and their proper uses.
    d. Perform basic maneuvers, e.g. suture of skin, soft tissues, fascia; tie knots; obtain simple hemostasis.
    e. Learn basic techniques of dissection and handling of tissues.
    f. Under supervision:
        i. excise benign lesions of skin and subcutaneous tissues.
        ii. perform lymph node biopsy.
        iii. remove superficial foreign bodies.
        iv. incise and drain an abscess.
        v. repair simple lacerations.
        vi. repair umbilical and type I and II inguinal hernias.
        vii. perform appendectomy.
9. Demonstrate skills in sterile technique
    a. Understand indications for and utilize appropriate methods of routine and reverse isolation procedures.
    b. Maintain appropriate sterile technique in the ER, at the bedside, in the ICU, and in the office.
10. Demonstrate skills in wound management
    a. Differentiate between wound infection, hematoma, and seroma, and initiate therapy.
    b. Perform extensive debridement with supervision.
    c. Debride and pack wounds and apply dressings.
    d. Recognize and differentiate between wound infection and necrotizing fasciitis, and detect crepitus.
    e. Identify wound dehiscence and evisceration.

f. Know and apply the specific recommendations for tetanus immunization (active and passive).
g. Know the clinical manifestations of rabies in carrier and patient, and agents available to prevent development of the disease.
h. Obtain proper wound specimen and perform and interpret Gram stain.

11. Prioritize and manage complications by assessing and managing complications or change in health status, such as:
    a. altered mental status.
    b. fever.
    c. hypotension.
    d. hypovolemia, oliguria.
    e. hypoxia.
    f. pain .
    g. vomiting, distention, nausea.
    h. bleeding at the bedside & coagulopathy.
    i. atelectasis, pneumonia, aspiration.
    j. fecal impaction, constipation
    k. chest pain,
    l. dyspnea
    m. pneumothorax
    n. congestive heart failure, pulmonary edema
    o. superficial phlebitis,
    p. pulmonary embolus
    q. urinary retention
    r. diabetic ketoacidosis or hyperosmolar coma
    s. peripheral ischemia or cyanosis
    t. seizures, alcohol or drug withdrawal

HNL Rotation

The main goal of this rotation is to provide the R1 an organized experience to enable him/her to acquire the basic knowledge and skills in the evaluation and management of patients presenting with head and neck/laryngologic complaints.

The R1 will be considered an integral part of the Head and Neck team and will take the place and function as the R2 resident while the R2 is on the research rotation. The R1 will carry the consult pager and perform the initial workup and evaluation of inpatient consults, under close and appropriate supervision of the senior residents on service.

At the completion of this rotation the R1 resident should be knowledgeable in the following areas and be able to:

1. Perform a complete head and neck exam
2. Demonstrate competence with basic head and neck examination equipment (headlight, tongue blades, nasal speculum, basic otologic microscopy.
3. Demonstrate familiarity themselves with more advanced instrumentation for examination such as fiberoptic endoscopes, rigid endoscopes, video stroboscopy, more advanced microscopic otoscopy.

4. Develop knowledge to evaluate inpatient consults and present them to their senior resident.
5. Based on clinical opportunities provided, demonstrate beginning competence with the most common head & neck consultations.

Neurosurgery Rotation

The main goal of this rotation is to provide the R1 resident an organized experience to enable him/her to acquire the basic knowledge and skills in the evaluation and management of patients presenting with neurosurgical complaints. The resident should gain an appreciation for the collaborative efforts between the ORL and NES specialties.

At the completion of this rotation the R1 resident should be knowledgeable in the following areas and be able to:

1. Review basic cranial anatomy including cranial nerve origin and function.
2. Perform neurosurgical patient evaluation, assessment and management.
3. Learn evaluation and treatment of neurological trauma, critical care and emergencies.
4. Know the indications for and basic interpretation of diagnostic tests and X-rays including basic head CT and MRI imaging studies.
5. Demonstrate basic neurosurgical skills, technique, and wound management including simple craniotomy, dural suturing and craniotomy closure.
6. Demonstrate recognition, diagnosis, and basic management of CSF leaks.
7. Insert and manage a lumbar drain.
8. Demonstrate management of common neurosurgical complications.
9. Differentiate between stroke, TIA, and non-cerebrovascular events causing neurological symptoms and know the diagnostic techniques.
10. Participate in at least five major procedures (cranial decompression, craniotomy, removal of pituitary adenoma).

Pediatric Surgery Rotation

The main goal of this rotation is to provide the R1 an organized experience to enable him/her to acquire the basic knowledge and skills in the evaluation and management of patients presenting with pediatric surgery complaints.

At the completion of this rotation the R1resident should be knowledgeable in the following areas and be able to:

1. Understand the vital signs of a well and a sick child.
2. Recognize the special dosing issues that apply to pharmacology and a pediatric patient.
3. Demonstrate sensitivity for the delicacy of operating on pediatric tissue.
4. Understand pediatric hernia anatomy.
    a. How to reduce an incarcerated hernia
    b. The difference between hernias and hydroceles
    c. Knowledge of anatomical landmarks by identifying them in a hernia repair
5. Understand the work-up and management of pyloric stenosis.
6. Understand the diagnosis and management issues of appendicitis in a pediatric patient.
    a. Explain how perforation rates vary with age
    b. Explain the role of laparoscopy in pediatric appendicitis

c. Define the conditions which support a strategy of interval appendectomy
d. Can work up a patient with appendicitis, present to an attending, and prepare for surgery without attending needing correction or prompting

Plastic Surgery Rotation

The main goal of this rotation is to provide the R1 an organized experience to enable him/her to acquire the basic knowledge and skills in the evaluation and management of patients presenting with plastic and reconstructive surgery complaints.

At the completion of this rotation the R1 resident should be knowledgeable in the following areas and be able to:

1. Demonstrate good suturing technique and gentle tissue handling, and the basics of tissue coverage techniques.
2. Know the basic presentation of skin cancers and skin cancer extirpation defects.
3. Demonstrate basic familiarity with skin cancer reconstruction principles.
4. Know hand anatomy and demonstrate familiarity with basic treatment techniques.
5. Demonstrate basic familiarity with surgical procedures to correct cleft lip and cleft palate.
6. Know basic techniques of facial fracture repairs.
7. Understand beginning familiarity with aesthetic surgery principles.

SICU and Trauma Rotations

The main goal of this rotation is to provide the R1 resident an organized experience to enable him/her to acquire the basic knowledge and skills in the evaluation and management of patients in the intensive care setting.

At the completion of this rotation the R1 resident should be knowledgeable in the following areas and be able to:

1. Demonstrate skills in critical care and management of shock
    a. Differentiate types of shock (hemorrhagic, cardiogenic, septic, and neurologic) and initiate appropriate therapy.
    b. Insert central venous and arterial catheters and obtain hemodynamic data; interpret data and initiate therapy.
    c. Recognize clinic presentation of a pneumothorax and insert chest tube
    d. Understand and utilize basic principles of mechanical ventilation.
    e. Recognize the indications for blood component therapy and initiate therapy.
    f. Recognize a transfusion reaction and initiate management.
    g. Institute measures to prevent upper GI bleeding in critically ill patients.
2. Demonstrate skills in coagulation and anticoagulation
    a. Choose the appropriate tests for diagnosis of a coagulopathy, and have a working knowledge of factor analysis.
    b. Apply effective preventive measures for DVT and PE.
    c. Initiate and monitor therapeutic anticoagulation and its complications.
    d. Diagnose and manage acute deep venous thrombosis.
    e. Acutely manage a patient with a suspected acute pulmonary embolus, and provide a differential diagnosis.
3. Demonstrate skills in applied cardiac physiology

a. Recognize rhythm disturbances, myocardial ischemia on EKG.
b. Assess, formulate a differential diagnosis and initiate therapy for hypotension.
c. Know and apply appropriate treatment for supraventricular tachycardia.
d. Treat congestive failure and acute pulmonary edema.
e. Manage hypertension in a surgical patient. Understand multidrug therapy and the toxic and side effects of antihypertensive drugs.

4. Demonstrate skills in applied renal physiology
    a. Know the pathophysiology of the development of acute renal failure; the differentiation of prerenal, renal, obstructive types of renal failure; and the general concepts of prevention and treatment of ARF.
    b. Recognize and treat simple electrolyte disturbances.
    c. Understand appropriate fluid replacement and balance.
5. Demonstrate skills in applied pulmonary physiology
    a. Know the manifestations—clinical and by laboratory testing—of obstructive pulmonary disease and pulmonary insufficiency, and their surgical perioperative management.
    b. Recognize bronchoconstrictive disorders and their perioperative management.
6. Demonstrate skills in applied nutrition
    a. Learn to manage the nutrional needs of a critically ill patient.
    b. Placement of nasogastric tube and dophoff tube.
7. Demonstrate surgical skills
    a. Develop surgical skills in CPR, CVC placement, arterial catheter placement, and chest tube placement.
    b. Perform first assistant in bedside bronchoscopy, pulmonary lavage, and tracheotomy.
    c. Obtain oropharyngeal control of airway, provide Ambu ventilation and perform orotracheal intubation.

R1 Didactics

During the last month of internship, the R1s will participate in one month of research didactics. They will participate in organized research activities aimed to help the resident develop and submit a CORE grant. During this month, the residents will also be expected to familiarize themselves with the faculty's research opportunities and identify a faculty mentor for their research projects.

During this month, the R1 will take call jointly with an R2/R3 junior resident. The R2/R3 will supervise the R1 and see and staff all consults. The purpose of this joint call is to allow the R1 see how call works and appropriate workup and treatment of consults.