

USC Tina and Rick Caruso
Department of Otolaryngology
Head and Neck Surgery

Otolaryngology Head and Neck Surgery

**Medical Student
Sub-internship
Orientation Guide and Curriculum**

**USC Caruso Department of
Otolaryngology
Head & Neck Surgery**

**Keck Medicine of
University of Southern California**

Keck School of Medicine of **USC**

Welcome

First, we are glad you have sought interest in USC Otolaryngology – Head & Neck Surgery. We take great pride in our specialty and look forward to providing you with an excellent learning opportunity and clinical experience. We are fortunate enough to have every Otolaryngology subspecialty strongly represented in our department. This with our excellent complement of residents places our program among the strongest in the nation.

Our department is founded on a strong commitment to medical education. We have attempted to structure student rotations to be as enriching as possible, combining a somewhat structured curriculum with much opportunity for hands-on and individualized attention. Our faculty, staff, and residents are all very interested in making your stay as fulfilling as possible. Please let us know if there are any other ways we can assist.

Goals and Objectives

We have designed the Otolaryngology – Head & Neck Surgery sub-internship rotation to provide a high-level clinical experience in our specialty for our students. We therefore hope to provide a broad exposure that includes every subspecialty in our field. Our diverse department will let you experience and participate in many advanced therapeutic and diagnostic procedures. You will be a member of the clinical team with an active and direct role in patient care. We hope that you will learn first-hand what residency training in Otolaryngology entails.

Following completion of the Medical Student Otolaryngology Rotation, students will be able to:

- Demonstrate fundamental medical knowledge of Otolaryngology and common Head & Neck disorders
- Perform a focused head and neck history guided by the patient's chief complaint
- Perform a comprehensive head and neck physical examination
- Identify when advanced examination or testing may be required and perform basic interpretation
- Perform basic Otolaryngology procedures.

Policies and Procedures

Visiting students may find useful information at the Keck School of Medicine Student Affairs website:

<http://www.keck.usc.edu/education/md-program/student-affairs/visiting-student-clerkships/>

US visiting student rotators must apply for a medical student rotation via the AAMC Visiting Student Application Service (VSAS - <https://services.aamc.org/20/vsas/>). International students should contact the Keck School of Medicine Student Affairs office for more information. Contacts and website information are found below in the "Important Contacts" section. **You will need to submit this application NO LESS THAN two months in advance of your expected rotation date.** There are pre-defined rotation dates that conform to the USC academic calendar. We strongly prefer you use these dates for your USC rotation, however we are aware there are

USC Tina and Rick Caruso
Department of Otolaryngology
Head and Neck Surgery

sometimes irreconcilable conflicts and we may be able to accommodate flexibility. Please make our office aware as soon as possible if this is a concern.

Please contact Dr. Michael Johns, the Director of Medical Student Education in the Department of Otolaryngology, in addition to completing the application process. Contact information is below.

As a policy we are currently allowing a total of four rotators for each of our 4-week blocks. This number is limited, but allows for the most individualized and hands-on instruction possible.

Attire during clinical duties is important. Most rotations will have “clinic days” and “operative days”. Professional attire is generally appropriate in clinic. For non-clinic days, hospital scrubs are acceptable (a limited supply may be borrowed while on rotation).

It is expected that all students participate in all parts of the rotation and all required elements of the rotation. Needless to say timeliness is of utmost importance (“>90% of success is showing up on time”). Our days are typically not unremittingly grueling, however often there are unexpected events and late evenings. Failure of participation in a full day’s work may warrant explanation.

Rotation Schedule

Students will generally rotate for 1-week at LAC+USC Medical Center (our county hospital) or 1-week at Children’s Hospital of Los Angeles (CHLA) and 3 weeks at Keck Medicine of USC Hospital and clinics. The 3 weeks at Keck will be typically divided into 1 week on the Head and Neck service, 1 week on the Otology and Plastics services, and 1 week on the Laryngology and Rhinology/Sleep services in no particular order. Modifications can be made tailored to your personal interests. Keep in mind that it is important to interact with all of the faculty in the department during your time here. Contact Dr. Michael Johns if you need guidance accomplishing this goal.

Pre-Rotation, Arrival, & Living

All students should please contact Crystal Montion and Dr. Michael Johns (email is best) approximately 1 week prior to your rotation to ensure we can provide the best experience possible.

All students rotating at CHLA, please contact Yahaira Sarmiento and Dr. Debra Don approximately 3 weeks prior to your rotation to begin necessary paperwork and assure that a health clearance is completed.

For visiting students, after arrival there are several bureaucratic tasks that must be completed, such as obtaining ID’s and parking access for our facilities. This could easily take a half-day to a day to complete. If possible, arriving a business day ahead of time may allow some of this to be completed in advance. See below for ID and parking details.

USC Tina and Rick Caruso
Department of Otolaryngology
Head and Neck Surgery

Please arrange for some form of temporary housing while rotating in Los Angeles. The SOM Student Affairs Office can provide a list of housing options. See this document for details <http://www.keck.usc.edu/wp-content/uploads/2015/09/Visiting-Student-Guide-Updated-9-10-15.pdf>. Also, please be aware that Los Angeles is largely a “driving city”. While public transportation exists, it may be difficult to navigate if it is solely relied upon.

Campus security is strong and so the work and educational environments are safe. However, while most of LA is quite safe, there are neighborhoods where one should be more cautious.

ID's and Parking

Visiting students are usually scheduled for a Livescan appointment at LAC on 1st day of rotation. Once you complete Livescan, you will receive a temporary badge. Health clearances are usually done prior to your start date but if not, you will have to go to student health to be cleared. You will have to bring your health clearance with you to Keck GME for registration. Please note that KH will not issue Keck badges to visiting students. ORCHID training is scheduled on the 1st Tuesday of the rotation. Keck Hospital accepts ORCHID training so you do not have to take Cerner training at Keck Hospital. Mary Samaniego samanieg@med.usc.edu (Keck GME office) can facilitate Cerner access and OR clearance.

Parking is not provided for visiting medical students, but is available in several paid parking lots and meter spaces on nearby streets.

Weekly parking permits are available to park at CHLA in surrounding area lots for purchase.

Orientation Meeting

Please plan for a brief orientation meeting the first morning of your rotation. Plan to meet at Dr. Michael Johns' office, in the Center for Health Professions (1540 Alcazar St. Ste204M). Email in advance to organize the meeting time and confirm location. Here we will distribute rotation schedules, answer questions, and generally help get you prepared for the upcoming month.

Please plan to meet Dr. Debra Don on the first morning of your rotation at CHLA, in the ENT administrative offices in the Outpatient Tower (4640 Sunset Blvd.), for a brief orientation and to obtain your schedule.

Important Contacts and Information

- **Dr. Michael M. Johns**, *Director Medical Student Education – Otolaryngology*
 - (404) 815-1537 michael.johns@med.usc.edu
- **Crystal Montion**, *Medical Student Education Coordinator*
 - (323) 226-7315 and (323) 442-5585 crystal.montion@med.usc.edu
- **Dr. Niels Kokot**, *Residency Program Director*
 - niels.kokot@med.usc.edu
- **Dr. Tamara Brown**, *Chief of Service, Otolaryngology, LAC+USC*
 - tamara.brown@med.usc.edu
- **Dr. Debra Don**, *Director Medical Student Education at CHLA*

USC Tina and Rick Caruso
Department of Otolaryngology
Head and Neck Surgery

- (626) 808-2908 ddon@chla.usc.edu
- **Yahaira Sarmiento**, *Medical Student Education Coordinator at CHLA*
 - (323) 361-5908 ysarmiento@chla.usc.edu
- **USC Office of Student Affairs** (Contact information, Application Details & Paperwork)
 - (323) 442-2553 medstuaf@usc.edu
 - <http://www.keck.usc.edu/education/md-program/student-affairs/>
- **AAMC Visiting Student Application Service**
 - <https://services.aamc.org/20/vsas/>
- **Keck Medicine USC Operator:** (323) 442-8500
- **Otolaryngology Home Page:** <http://www.keck.usc.edu/otolaryngology/>

Faculty

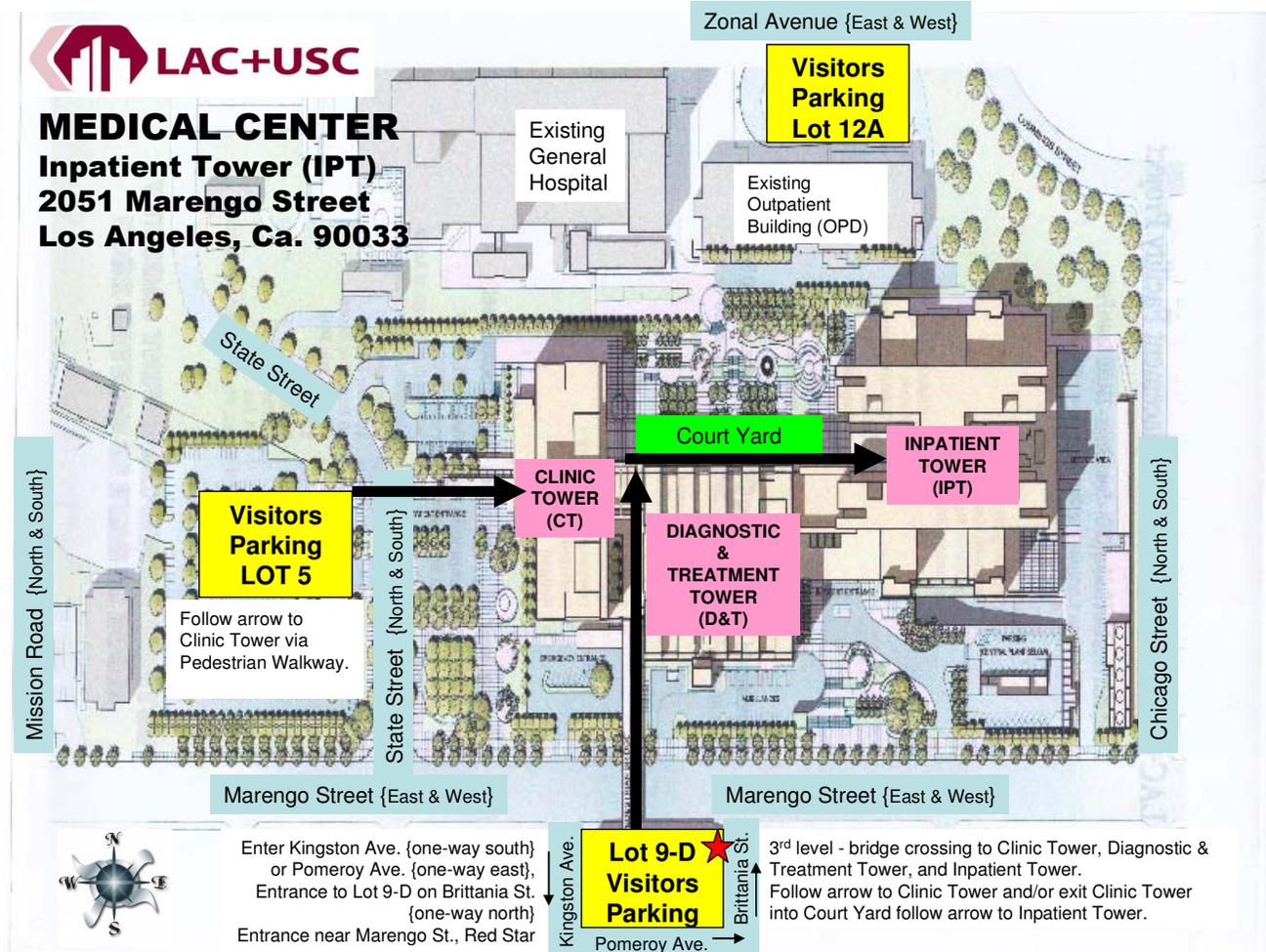
Clinical Faculty	Specialty	
John Oghalai, MD	Otology/Neurotology	Department Chair
Niels Kokot, MD	Head and Neck Surgery	Otolaryngology Residency Program Director
Tamara Brown, MD	Head and Neck Surgery	Otolaryngology Residency Associate Program Director, Chief of Service, LAC+USC
Michael Johns, MD	Laryngology	Director, Medical Student Education
Elizabeth Ference, MD	Rhinology/Skull Base Surgery	
Edie Hapner, PhD SLP	Speech Pathology	
Eric Kezirian, MD	Sleep Medicine/Surgery	
Amit Kochhar MD	Facial Plastic Surgery	
Alexander Markarian, MD	Facial Plastic Surgery	
Dennis Maceri, MD	Thyroid/Parathyroid Surgery	
Karla Odell, MD	Laryngology	
Lindsay Reder, MD	Laryngology	
Dale Rice, MD	Rhinology	
Uttam Sinha, MD	Head and Neck Surgery	
Mark Swanson	Head and Neck Surgery	
Brenda Villegas, SLP	Speech Pathology	
Courtney Voelker, MD PhD	Otology/Neurotology	
Bozena Wrobel, MD	Rhinology/Skull Base Surgery	

USC Tina and Rick Caruso
Department of Otolaryngology
Head and Neck Surgery

Debra Don, MD	Pediatric Otolaryngology	
Jeffrey Koempel, MD	Pediatric Otolaryngology	
Christian Hochstim, MD	Pediatric Otolaryngology	
Gabriel Gomez, MD	Pediatric Otolaryngology	

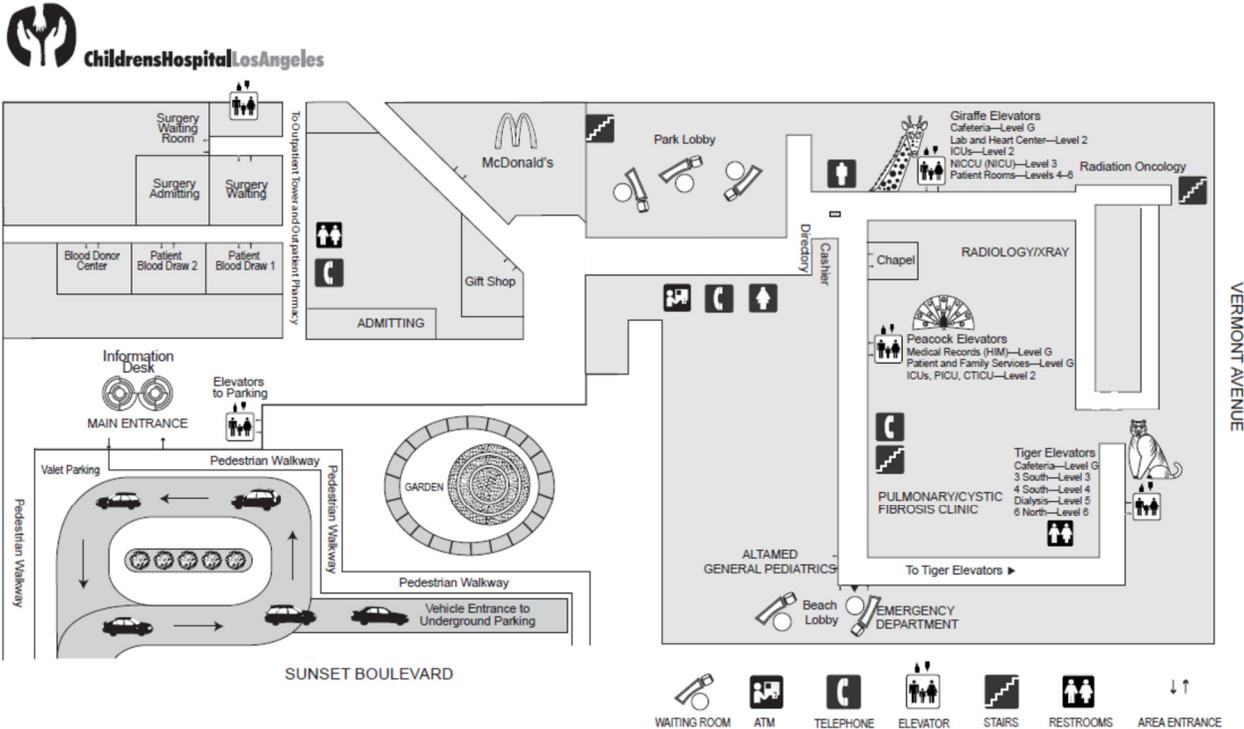
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 Department of Otolaryngology
 Head and Neck Surgery

- LAC+USC
 - 2051 Marengo Street Los Angeles, CA 90033
 - <http://dhs.lacounty.gov/wps/portal/dhs/lacusc/>



USC Tina and Rick Caruso
Department of Otolaryngology
Head and Neck Surgery

- Children's Hospital of Los Angeles
 - 4650 Sunset Boulevard, Los Angeles, CA 90027
 - <https://www.chla.org/getting-the-main-hospital>
 - <https://www.chla.org/pediatrics-location>



CURRICULAR DETAILS

Overall Learning Objectives

- Following completion of the Medical Student Otolaryngology Rotation, students will be able to:
- Demonstrate fundamental medical knowledge of Otolaryngology and common head & neck disorders
 - Perform a focused head and neck history guided by the patient's chief complaint
 - Perform a comprehensive head and neck physical examination
 - Identify when advanced examination or testing may be required and perform basic interpretation
 - Perform basic Otolaryngology procedures.

Reading Material

1. Primary Care Otolaryngology – now online
 - a. <http://www.entnet.org/EducationAndResearch/primaryCare.cfm>
2. ENT Secrets OR
 - a. <http://www.us.elsevierhealth.com/ent-secrets-9780323298568.html>
3. Pasha's Otolaryngology – Head and Neck Surgery Clinical Reference Guide

- a. https://www.pluralpublishing.com/publication_orlhns4e.htm

Specific Expectations (i.e. the basis for evaluation)

1. Medical Knowledge

- a. Reading Material
 - i. Primary Care Otolaryngology
 - ii. ENT Secrets or similar
 - iii. Selected articles as relevant to specific rotations (TBA)
- b. Didactics & Conferences
 - i. Grand Rounds and Resident Presentations – Fridays 7am
 1. Eli & Edith Broad Center for Regenerative Medicine, Room 101, 1425 San Pablo Street.
 - ii. LAC+USC Didactics, Tumor Board/Radiology Conference – Thursdays 3-5pm, while on LAC+USC
 - iii. Rotation-Specific Didactics (TBA)
 - iv. Tumor Board, Keck Medicine (Thursdays 7am)
- c. **Final Examination**, based primarily on *Primary Care Otolaryngology*; To be scheduled at orientation meeting. Straightforward case-based oral exam.

2. Patient Care

- a. Participation during rounds and clinic
- b. Short “checklist” Otolaryngology skills (below)

3. Problem-Based Learning

- a. **10-minute presentation** given on patient/topic based on exposure during rotation
 - i. All rotators to present during the Resident Presentations component of Grand Rounds and will be scheduled during orientation.

4. Professionalism

- a. Punctuality
- b. Participate in morning (and evening) rounds with team
- c. Participate in didactics, conferences and requirements above
- d. Participate in final examination
 - i. Covering topics in reading, didactics, or interesting case topics
 - ii. May include “systems-based practice” topics in otolaryngology
- e. Participate in Final Presentation (10 min)

5. Communication Skills

- a. Assessment based on #1-4 above

6. Systems-Based Practice in Otolaryngology

- a. Assessment based on #1-4 above, especially the final exam

Specific Learning Objectives

FACIAL NERVE PARALYSIS

1. Learn the etiology of facial nerve paralysis (idiopathic, trauma, neoplasia, infection, congenital and metabolic).

2. Learn the pathophysiology of nerve paralysis including neurapraxia, axonotmesis, and neurotmesis. Be familiar with the House-Brackmann grading of facial nerve paralysis.
3. Work-up for Bell's palsy patient, including H & P exam, audiogram, and evoked electromyography (electroneuronography).
4. Treatment of Bell's palsy (steroid, acyclovir, eye protection).

TINNITUS

1. Etiology
2. Treatment

OTITIS EXTERNA

1. Different types of otitis externa, including furunculosis, diffuse otitis externa, fungal diffuse otitis externa, necrotizing otitis externa.
2. Treatment of Otitis Externa

SEROUS OTITIS MEDIA

1. Pathogenesis.
2. Diagnosis and treatment.

ACUTE OTITIS MEDIA

1. List the common pathogenesis causing acute otitis media.
2. Clinical stages: stage of coryza, stage of hyperemia, stage of suppuration, and stage of resolution.
3. Treatment.
4. Complications: extracranial and intracranial.

CHRONIC OTITIS MEDIA

1. Determine the site of perforation: marginal or central.
2. Assess the condition of the mucosa in the middle ear cavity and the ossicles.
3. Presence of skin within the middle ear space (cholesteatoma).
4. Treatment.

VERTIGO

1. Determine the site of lesion: central vs. peripheral, by history and physical exam, which should include a Dix-Hallpike test.
2. Know the management of benign paroxysmal positional vertigo (BPPV), Meniere's disease, and vestibular neuronitis.
3. Understand the differences between vertigo, unsteadiness, light-headedness, headache and dizziness.
4. Learn a few other causes of vertigo, including syphilis, ototoxic drugs, Cogan's syndrome and multiple sclerosis.

SUDDEN DEAFNESS

1. Learn the differential diagnosis of hearing loss and with sudden onset and its management.
2. Learn management of immune-mediated sensorineural hearing loss.
3. Interpret audiograms.

EPISTAXIS

1. Etiology and management, including direct pressure, cauterization, anterior packing, embolization and ligation of the arteries.

ACUTE AND CHRONIC SINUSITIS

1. List the common pathogens causing acute and chronic sinusitis.
2. Learn the etiologic factors of sinusitis.
3. Describe the appropriate diagnostic and treatment approaches for sinusitis.
4. List the extracranial and intracranial complications of sinusitis.

FUNGAL SINUSITIS

1. Learn the different types of aspergillosis (invasive and non-invasive) in the immunocompromised and non-immunocompromised host.
2. Describe the pathogenesis of mucormycosis in the immunocompromised host.
3. Understand the aggressive management of invasive fungal infection in immunocompromised patients.

CAVERNOUS SINUS THROMBOSIS

1. Learn the pathogenesis of cavernous sinus thrombosis.
2. Understand the anatomy of the danger area of the face.
3. Work-up and management of cavernous sinus thrombosis.

GRANULOMATOUS SINUS DISEASE

1. List the most common causes of granulomatous lesions of the sinonasal tract.

RHINITIS

1. List the common causes of rhinitis.
2. Learn non-allergic, non-infectious rhinitis and the aspirin triad.

INFECTIOUS DISEASES OF SALIVARY GLANDS

1. List the most common pathogens and predisposing factors of acute sialoadenitis.
2. Management of acute sialoadenitis.
3. Learn the characteristics of salivary calculi.

NON-INFECTIOUS DISEASES OF SALIVARY GLANDS

1. Describe Sjogren's syndrome
2. Describe the triad of uveoparotid fever.
3. List the differential diagnosis of a mass at the floor of the mouth (e.g. ranula)

NEOPLASTIC DISEASES OF THE SALIVARY GLANDS

1. List the common benign salivary gland tumor in the adult.
2. The most common mass in the parotid gland in pediatric patient.
3. Learn the workup of a salivary gland mass.
4. Learn the characteristics of different malignant tumors of the salivary gland.
5. Management of benign tumors of the salivary gland.

ACUTE TONSILLITIS

1. List the common causes of acute tonsillitis.

2. Learn the presentation of the peritonsillar abscess.
3. Learn the current management of acute tonsillitis and peritonsillar abscess.
4. List the indications for tonsillectomy, including obstructive sleep apnea.
5. Learn the complications of peritonsillar and parapharyngeal abscesses.

NASOPHARYNGEAL MASS

1. List the benign and malignant tumors of the nasopharynx.
2. Understand the pathogenesis of unilateral serous otitis media in an adult with nasopharyngeal mass.
3. Learn angiofibroma and nasopharyngeal carcinoma.

ACUTE LARYNGITIS

1. Learn the etiology and management of acute supraglottitis.
2. List the differential diagnosis of chronic laryngitis, including gastroesophageal reflux disease.

LARYNGEAL MANIFESTATION OF SYSTEMIC DISEASE

1. List the systemic diseases, which can, on occasion, involve the larynx.

CONGENITAL ANOMALY OF THE LARYNX

1. List the most common anomalies of the larynx and their management.

BENIGN AND MALIGNANT TUMORS OF THE LARYNX

1. Learn the pathogenesis and management of laryngeal papillomatosis in children.
2. Describe the appropriate diagnostic and treatment approaches for laryngeal cancer.

THYROID NODULES

1. Describe the appropriate diagnostic approach for thyroid nodules.
2. List the cytologic findings of papillary and follicular cell carcinoma on fine needle aspiration biopsy.
3. Describe the management of papillary and follicular cell carcinoma.
4. Learn the classification of MEN syndrome.
5. Describe the prognostic indicators for thyroid cancer.

NECK MASS

1. Become proficient in performing the head and neck exam of neck masses, including bimanual palpation.
2. Workup and management of neck masses in children and adults.

PLASTIC AND RECONSTRUCTIVE SURGERY

1. Describe the different layers of skin.
2. List the suture materials used to close the deep and superficial layers of the skin.
3. Learn the basic principles of suture technique and closure of an incision, including a Burrow's triangle.

TRAUMA

1. Learn the ABC's (airway, bleeding, c-spine) of maxillofacial trauma.
2. Describe the diagnostic approaches for penetrating wounds of the neck.

USC Tina and Rick Caruso
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Head and Neck Surgery

3. Learn the management of facial laceration and how to avoid traumatic tattooing.
4. Describe the management of zygomatico-orbital and LeFort fractures.
5. Describe the appropriate diagnostic and treatment approaches for CSF rhinorrhea.
6. Understand the surgical anatomy of the maxillofacial skeleton, including the facial buttresses.

USC Tina and Rick Caruso
 Department of Otolaryngology
 Head and Neck Surgery

Name: _____

OTO Skills

Please have a resident or faculty initial upon completion.

Skills check list					
Comprehensive H&N Exam (x5)					
Observe TM mobility (pneumotoscopy)					
Perform Otoscopy with microscope					
Indirect Laryngoscopy (x5)					
Observe Flexible Laryngoscopy (x5)					
Audiogram (observe & interpret)					
Observe myringotomy					
Orotracheal Intubation					
Skin/SubQ Closure of Wound					
Tracheotomy tube change					
Tracheotomy (assist)					
Nasal Packing					
Cerumen Removal					
Perform Flexible Laryngoscopy (x3)					
Identify Structures on Nasal Endoscopy					