PROGRAM OVERALL AND SPECIFIC GOALS AND OBJECTIVES

The four year oral and maxillofacial surgery program is an educational program designed to provide clinical, didactic, and hospital experiences at the post doctoral level in the full scope of OMS. The program gives the residents the knowledge, skills and judgment necessary to qualify for certification by the American Board of Oral and Maxillofacial Surgery. The residents rotate with the departments of: Anesthesiology, including Pediatric Anesthesiology, Internal Medicine, Surgery, including SICU, Otolaryngology and Plastic Surgery. The Standards for Advanced Specialty Education Program in Oral and Maxillofacial Surgery by the American Dental Association Commission on Dental Accreditation are the underlying basis for the program.

EMPHASIS IS PLACED ON BOARD CERTIFICATION following training in order to impress on the residents the significance of certification as a measure of their competency and dedication to the field of oral and maxillofacial surgery.

The program allows the resident to:

2. Develop a sense of responsibility to the patient, the community and the profession.
3. Develop the concept of continuing education and participation in educational programs upon completion of training.
4. Develop an appreciation and understanding of the interaction of OMS with other related disciplines of dentistry including endodontics, orthodontics, periodontics, prosthodontics, oral pathology and reconstructive dentistry.

The goals of the oral and maxillofacial surgery program are accomplished via:

1. Seminars, lectures, conferences, journal and video clubs, and other didactic activities.
2. Ongoing patient care and evaluation with review of patient records, treatment planning, management and complications.
3. Rounding on hospitalized patients.
4. Outpatient, inpatient, and ambulatory surgery activities.
5. Surgery rotation for a total of Six months (4 months general surgery, including one month SICU, and two months surgical specialties, typically ENT and Plastic Surgery).
6. Rotation to Medicine for two months.
7. Rotation to Anesthesia for five months. (including 1 month of pediatric anesthesia).
8. Emergency room on-call while on OMFS service.
The overall and specific goals and objectives are to include, but are not to be limited to, the goals and objectives listed.

Discipline/Surgery Area: Reconstruction Surgery including dental implants and grafting

**Instruction in this discipline will enable the resident** to be able to restore a patient with significant maxillofacial hard and soft tissue defects to form and function. The objectives of this curriculum for reconstructive surgery are to provide to OMFS residents with the fundamental knowledge in the available techniques for reconstruction of maxillofacial defects and the underlying basic biologic principles of reconstructive surgery. A significant portion of this discipline is focused on implants and implant dentistry, as it currently represents a significant component of the modern practicing oral and maxillofacial surgeon. In addition, to instruction in the technical aspects of reconstruction, the resident is taught to evaluate, treatment plan, and make use of various imaging in the overall care of the patient presenting with a maxillofacial defect.

**SPECIFIC GOALS AND OBJECTIVES**

- The restoration of function
- The preservation of remaining natural
- Restoration and enhancement of aesthetics
- Improve patient self esteem and social confidence
- Enable fabrication of fixed prostheses
- Augmentation of alveolar and supporting bone
- Prevention of alveolar bone atrophy and loss of supporting bone
- Preservation of reconstructed alveolar and supporting bone
- Preservation of overlying soft tissue
- Improve nutrition
- Improve mastication
- Improve speech
- Improve deglutition
- Minimize gag reflex
- Enabling successful orthodontic treatment
- Enabling support for removable appliances including
- Minimize neurological dysfunction
- Aid in inability to accommodate to tissue bone prostheses
- Minimize reaction to materials used in tissue bone prostheses
- Provision of anchorage of maxillofacial, nasal, ear and-orbital prostheses
- Minimized risk of osteoradionecrosis or osseonecrosis utilizing fixed prostheses

**RECONSTRUCTION CURRICULUM**

**IMPLANTS**

- Indications
- Bio-clinical basis for implants
- Osseointegration
- Implant Interface
- Factors effecting biomechanics
- Medical consideration and evaluation of the implant patient
- Clinical examination
- General
- Specific consideration
- Site evaluation
- Anatomy
- Radiologic imaging
- Scans, 3D, panoramic, cephalometric, periapical radiography
- Risks, benefits and alternatives of treatment
- General and Specific Contraindications
Informed consent
Treatment planning
Interdisciplinary approach
Implant prostheses for surgeons
Restorative concepts
Importance of restorative considerations, including esthetics
Presurgical treatment planning and integration of treatment
Edentulous and non edentulous
Single tooth implant
Aesthetic considerations
Soft tissue considerations
Extractions
Atraumatic
Surgical templates-guide
Types and function
Interim Prostheses
Implant materials and types
Surgical implant placement
Patient preparation
Anesthesia
Timing
Sequence
Methodology of implant placement and uncovering
Immediate placement
Immediate load
Post operative care
Exposure
Implant maintenance, recalls
Surgeon obligations
Options and methods of prosthetic restoration
Special situations
Zygomatic implants
Laterization of nerves
Irradiated bone
Alveolar clefts and craniofacial defects
Peri-implantitis
Complications
Failing implants
Fixture removal
Implants in the growing patient

**GRAFTING**
Hard and soft tissue

Indications
Risks, benefits and alternatives
Autogenous vs. allograft
Donor sites
Harvesting techniques, autologous
Platelet Rich Plasma
Soft tissue grafting
Full and split thickness
Free and pedicle
Hard tissue grafts
Biology Socket Preservation, Guided Bone Regeneration
Block and particulate ridge augmentation, ridge splitting and onlay grafting techniques
Sinus augmentation and elevation
Alveolar distraction
Implant placement timing
Special situations
Complications

OTHER RECONSTRUCTION
Clefts (lip and palate)
Surgical and nonsurgical
Epidemiology and Sequencing
Primary and Secondary surgical treatment
Management of Alveolar Cleft
Orthognathic surgery for the cleft patient
Facial Esthetics and Cosmetics:
  • Esthetic evaluation of the face
  • Chemical peel and dermabrasion
  • Esthetics surgery of the perioral region
  • Collagen and Botox
  • Blepharoplasty including brow lift
  • Basic rhinoplasty
  • Rhinoplastic techniques in association with Le Fort I. Osteotomy
  • Revision rhinoplasty strategies
  • Rhytidectomy white including superficial musculoaponeurotic system
  • Facial liposuction and maxillofacial surgery
  • Posttraumatic orbital reconstruction
  • Facial implants including cheek augmentation
  • Scar revisions
  • Use of local flaps for facial reconstruction
  • Computer imaging and facial surgery
Distraction
Skeletal
Alveolar
Tuberosity reduction
Genial tubercle
FOM procedures
Micro-neurovascular surgery

Discipline/Subject Area: Orthognathics

Goals and Objectives of Training: Instruction in this discipline will enable the resident to:

Diagnose and treat cranio-dento-facial deformities
  • this includes compiling, collating, analyzing and maintaining of data
  • preparation of study models and cephalometric tracings

Utilize the database, study models and tracings to plan the orthodontic and surgical treatment for the dentofacial deformity

Preoperatively manage, including informed consent, discussion of complications, H and P, laboratory workup, autologous transfusions, surgical stents

Understand the relationships of orthodontics and sleep disorders with orthognathics

Surgically manage the deformity including, maxillary, mandibular, symphyscal and subapical osteotomies

Evaluate and manage intraoperative and immediate postoperative status of airway, vital signs, and complications

Follow up on completed cases
Discipline/Subject Area: **Dentoalveolar Surgery**

**Goals and Objectives of Training:** Instruction in this discipline will enable the resident to:

Improve clinical skills, speed and judgment

Diagnose and surgically manage periapical infections, including apicoectomies, removal of cysts, removal of teeth, correction of bony irregularities, and periodontal problems

Diagnose and surgically treat impacted teeth including exposure, repositioning, and removal

Remove fractured and displaced apices in the submandibular, infra-temporal space and maxillary sinus

**Discipline/Subject Area:** **Trauma**

**Goals and Objectives of Training:** Instruction in this discipline will enable the resident to:

Evaluate the maxillofacial patient including, injuries to the head, neck, chest and abdomen

Order and interpret appropriate laboratory and radiological studies

Initially surgically treat the OMF injury

Plan and execute definitive treatment of the OMF injury in a sequential manner, including open and closed reductions of the maxilla, mandible, orbito-zygomatico-maxillary complex, nose, naso-orbital-ethmoidal region as well as soft tissue injuries of the oro-facial areas.

**Discipline/Subject Area:** **Pathology**

**Goals and Objectives of Training:** Instruction in this discipline will enable the resident to:

Diagnose and treat lesions, cysts, tumors (malignant or benign), maxilla sinus disease, head and neck infections, salivary gland and duet diseases, injuries to branches of the fifth and seventh nerves, temporomandibular joint disease

**Discipline/Subject Area:** **Ambulatory General Anesthesia and Deep Sedation**

**Goals and Objectives of Training:** Instruction in this discipline will enable the resident to:

Be familiar experience and capable of administering ambulatory techniques for general anesthesia and deep sedation to adults and children for OMS procedures

Participate in a longitudinal and progressive experience in the management of pain and anxiety control including behavioral management, local anesthesia, inhalation analgesia, minimal sedation, deep sedation and general anesthesia
Discipline/Subject Area: **Physical Diagnosis**

**Goals and Objectives of Training:** Instruction in this discipline will enable the resident to:

- Take a complete history
- Perform a complete physical examination
- Order, review and evaluate laboratory and radiographic studies
- Recognize deviation from normal health status
- Arrive at a medical risk assessment
- Successfully complete the written and clinical portion of the Physical Diagnosis Course (Foundations of Clinical Medicine II) at NYMC

Discipline/Subject Area: **Pain Management**

**Goals and Objectives of Training:** Instruction in this discipline will enable the resident to:

- Become familiar with and utilize the various modalities of pain-control, including behavioral management, local anesthesia, inhalation analgesia and anesthesia, and IV and IM conscious/unconscious/deep sedation
- Perform a preoperative evaluation of the patient’s need for pain and anxiety control
- Gain experience in the overall management of the anxious patient (adult and pediatric)
- Perform history and physical evaluation on the ambulatory anesthetic patient
- Develop a medical risk assessment

Discipline/Subject Area: **Applied Pharmacology**

**Goals and Objectives of Training:** Instruction in this discipline will enable the resident to:

- Develop and expand his/her knowledge of pharmacological therapies routinely used in oral and maxillofacial surgery
- Develop a knowledge of the indications, contraindications, adverse reactions and drug antagonistic and synergistic interactions

Discipline/Subject Area: **Applied Physiology**

**Goals and Objectives of Training:** Instruction in this discipline will enable the resident to:

- Develop and expand his/her knowledge of the physiology of the human body as related to the management of surgery patient, including but not limited to, the major organ functions, fluid and electrolyte balances
Discipline/Subject Area: Surgical Anatomy

Goals and Objectives of Training: Instruction in this discipline will enable the resident to:

- Review head and neck anatomy
- Perform specific surgical procedures in the OMF region on a cadaver

Discipline/Subject Area: Microscopic Anatomy (Oral Pathology)

Goals and Objectives of Training: Instruction in this discipline will enable the resident to:

- Correlate clinical and microscopic features of oral pathological lesions of the OMF regions
- Provide diagnosis of pathological slides

Discipline/Subject Area: Greater N.Y. OMS Lecture Series

Goals and Objectives of Training: Instruction in this discipline will enable the resident to:

- Have additional didactics exposure to basic sciences such as physiology, microbiology, pharmacology
- Have exposure to ongoing lectures on such topics such as cosmetic surgery, management of head and neck tumors, pediatric pathology, ambulatory anesthesia, cleft lip-palate deformities, use of lasers, advances in implants and bone grafting, TMJ disease, rigid fixation

Discipline/Subject Area: Radiology and Imaging

Goals and Objectives of Training: Instruction in this discipline will enable the resident to:

- Utilized various modalities in radiographic imaging including ultrasound radioactive, computerized tomography, dentscans, conventional radiography, MRI
- Evaluate imaging for disease of the cardiovascular, pulmonary, head and neck, oral and maxillofacial and temporomandibular joint areas

Discipline/Subject Area: Medicine

Goals and Objectives of Training: Instruction in this discipline will enable the resident to:

- Obtain an accurate medical history
- Perform a physical examination
- Order and interpret laboratory data
- Fluid management
- Recognized significant deviations from normal
- Interpret the medical record, evaluate the patient’s medical record status, make a surgical risk assessment and appreciate the need for consultation when necessary prior to and during treatment
- Perform EKG interpretation
- Experience diabetic care, cardiac care
- Gain experience in anti-coagulation management
Resident duties and training in Medicine include, but not limited to:
- Full time commitment to the rotation
- Taking on call
- Admit patients to and discharge from the hospital inpatient wards and EM
- Daily medical management of inpatient care
- Participate in daily rounds
- Actively participate in the daily conferences, lectures, seminars

Training evaluation and supervision of training is accomplished through the means of resident evaluations and rotation evaluations by the resident

Discipline/Subject Area: **Emergency Medicine**

**Goals and Objectives of Training:** Instruction in this discipline will enable the resident to:

Perform a focused emergency physical exam
Diagnose and treat medical and surgical emergencies
Exhibit skills in medical risk assessment
Manage acutely ill patients in an emergency setting
Manage the trauma patient
Experience ACLS/ATLS protocol
Perform EKG interpretation
Order and interpret laboratory data

Resident duties and training received include, but not limited to:
- Full time commitment to the rotations
- 10-12 hour shifts as assigned
- Attendance at scheduled seminars, conferences, lectures and Grand Rounds
- Performing chest x-ray interpretation
- Acute Asthma care
- Management of Diabetic ketoacidosis
- Acute pulmonary and cardiac care

Training evaluation and supervision of training is accomplished through the means of the resident evaluations and rotation evaluation by the resident

Discipline/Subject Area: **Anesthesia**

**Goals and Objectives of Training:** Instruction in this discipline will enable the resident to:

Function as an anesthesia resident with increasing levels of responsibilities, including training in pre-anesthesia assessment, intubation and extubation, pharmacology, use of administration and monitoring devices and equipment, resuscitative procedures and postoperative assessment and management
Actively participate in conferences and rounds
Actively participate in anesthesia on-call

**Resident duties and training received include, but not limited to:**
- Full time commitment to the rotation
- Taking first on-call
- IV access
- Arterial lines/TLC
- Actively participating in the daily conferences, lectures, seminars
- Administering blood products
- Pain management
- ABG readings
Training evaluation and supervision of training is accomplished through the means of the resident evaluations and rotation evaluation by the resident

Discipline/Subject Area: Surgery and its subspecialties (ENT, Plastic Surgery, Neurosurgery)

**SURGERY**

**Goals and Objectives of Training:** Instruction in this discipline will enable the resident to:

Function as a surgical resident with commensurate level of responsibilities including, diagnosis and treatment of surgical emergencies
Experience the management of patients in the intensive care unit with emphasis on fluid and electrolyte balance
Management of acutely ill patients
Development of skills in medical risk assessments of the surgical patient
Assess and management of the surgical trauma patient
Experience ACLS/ATLS protocol

Resident duties and training received include, but not limited to:

- Full time commitment to the Dept. of Surgery
- Taking trauma first on-call every third night
- One month assignment to SICU
- Actively participate in scheduled conferences, lectures, seminars
- Nutritional care
- Ventilator care
- Insertion and management of central lines
- Pharmacology

Training evaluation and supervision of training is accomplished through the means of the resident evaluations and rotation evaluation by the resident

**OTOLARYNGOLOGY**

**Goals and Objectives of Training:** Instruction in this discipline will enable the resident to:

Surgical treatment and benign and malignant lesions of the head and neck, paranasal, sinuses, jaws, oral cavity and salivary glands
Perform fiberoptic nasopharyngeal and hypopharyngeal exams
Perform elective and emergency tracheostomies
Management of epistaxis
Perform sear exam
Interpret CT and MRI images of the head and neck

Resident duties and training received include, but not limited to:

- Full time commitment to the rotation
- Taking trauma first on-call
- Tracheostomy care
- Perform surgery of the parotid gland/facial nerve, including repair and grafting
- Full neck dissections

Training evaluation and supervision of training is accomplished through the means of the resident evaluations and rotation evaluation by the resident
PLASTIC SURGERY

Goals and Objectives of Training: Instruction in this discipline will enable the resident to:

- Diagnosis and treat congenital lesions of the lips, palate and nasal area
- Manage soft tissue injuries of the oral and maxillofacial area
- Perform esthetic surgical procedures of the maxillofacial region, including but not limited to rhinoplasty, blepharoplasty, rhytidectomy, genioplasty, lipectomy, otoplasty, scar revisions
- Actively participate in outpatient clinic and inpatient procedures

Resident duties and training received include, but not limited to:
- Full time commitment to the rotation
- Taking trauma first on-call
- Management of facial abnormalities
- Wound care
- Management of burn patients
- Experience in FT skin grafts, free flaps
- Experience a variety of plastic surgery techniques

Training evaluation and supervision of training is accomplished through the means of the resident evaluations and rotation evaluation by the resident

NEUROSURGERY

Goals and Objectives of Training: Instruction in this discipline will enable the resident to:

- Perform a neurological examination
- Evaluate the comatose patient
- Interpret images (CT and MRI) and diagnose intra-cranial lesions
- Perform bi-coronal flaps

Resident duties and training received include, but not limited to:
- Full time commitment to the rotation
- Taking trauma first on-call
- The evaluation and treatment of intra-cranial hemorrhage (subarachnoid, epidural, subdural, hypertensive)

Training evaluation and supervision of training is accomplished through the means of the resident evaluations and rotation evaluation by the resident