CURRICULUM, GOALS & OBJECTIVES

RESIDENCY TRAINING in ORAL & MAXILLOFACIAL SURGERY

ST. JOSEPH'S UNIVERSITY MEDICAL CENTER

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Draft 1 5/00 Revised 12/15 Accepted 7/00 Accepted 12/15 Revised 3/01 **Revised 11/16** Revised 3/04 Accepted 11/16 Revised 10/04 Revised 5/17 Accepted 11/04 Accepted 5/17 Revised 4/06 Revised 4/19 Revised 5/09 Accepted 7/19 Accepted 5/09 Revised 3/21 Revised 6/10 Revised 12/21 Accepted 6/10 Accepted 1/22 Revised 10/10 Revised 6/12 Revised 8/13

Accepted 10/13 Revised 10/14/14 Accepted 10/14 The following is based upon the requirements of the American Board of Oral and Maxillofacial Surgery, the current Standards for Advanced Education in Oral and Maxillofacial Surgery published by CODA, a committee of the ADA, and on Parameters and Pathways, a comprehensive set of clinical practice guidelines published by the AAOMS. The intent is to define the clinical and didactic curricula for the St. Joseph's University Medical Center residency program in oral and maxillofacial surgery so that residents can have similar experiences, requirements will be uniform, advancement to higher levels of responsibility will be appropriate and so that the program satisfies the needs of its graduates in terms of board certification, privileging and the development of critical competencies.

Program Description and Philosophy

The oral and maxillofacial surgery residency is a four-year program (with an MD option) based at St. Joseph's University Medical Center in Paterson, New Jersey (SJUMC). Three affiliated institutions play a role in resident education: the Veterans Administration New Jersey Health Care System (VANJHCS), Monmouth Medical Center (MMC) and Mountainside Hospital (MH). The American Dental Association accredits the program and the next site visit is scheduled for **2022** (delayed one year due to COVID).

Curriculum

A comprehensive didactic program has been developed to exceed published standards and to provide a basis for successful performance on board examinations. This includes weekly didactic seminars, monthly grand rounds, journal club sessions, morbidity and mortality reviews, case presentations and interdisciplinary conferences such as cleft palate/craniofacial team meetings, comprehensive cancer conferences surgical/orthodontic conferences and implant treatment planning sessions. Each resident participates in a head and neck cadaver dissection course and receives instruction in the ethical requirements for research as well as study design and statistical analysis. All residents must achieve and maintain certification in advanced cardiac life support, pediatric advanced life support and advanced trauma life support. An oral and maxillofacial pathology review course is conducted throughout the year correlating clinical issues with histopathology.

Residents are encouraged to develop sound clinical judgment based upon valid scientific principles. The rationale for medical and surgical decisions is routinely discussed in conferences and on teaching rounds held by faculty at all three hospitals. Off-service rotations include 22 weeks in the Department of Anesthesiology including assignment to cases involving emergent care and sedation and general anesthesia for older and medically fragile patients. Four weeks of the rotation focus on pediatric anesthesia and two weeks are devoted to the pre-anesthetic evaluation and risk assessment. This training is supplemented by resident management of a large volume of adult and pediatric moderate sedation and ambulatory general anesthesia cases under attending supervision.

Residents are oriented to physical diagnosis upon enrollment in the program. After an introductory course within the department, first year residents rotate at SJUMC's family practice facility to acquire basic skills in history taking and physical examination. Later, residents are assigned to the Department of Medicine for six weeks to function as part of a team following

patients admitted to the hospital for medical care followed by two weeks in the MICU. The general surgery rotation includes four weeks in the SICU. There are two additional off-service rotations, one in head and neck surgery and the other facial cosmetic surgery.

At SJUMC, residents participate in team meetings of the Regional Craniofacial Center and operate with the center's craniofacial surgeon, gaining experience in the evaluation and management of clefts and other craniofacial anomalies, craniosynostosis, swallowing disorders and velopharyngeal incompetence. Since SJUMC has no ENT residents and a collaborative relationship with the plastics division, senior oral and maxillofacial surgery residents are utilized to support the plastic surgery, oculoplastics and otolaryngology/head & neck surgery services. Experience is gained in head and neck oncologic surgery, facial cosmetic procedures and the use of flaps for reconstructive surgery of the head and neck. The VANJHCS provides additional experience with head and neck oncologic surgery as well as with dentoalveolar, preprosthetic and reconstructive surgery including implant site preparation and placement. Residents also rotate at MMC for additional experience in cosmetic and reconstructive surgery and participate in ambulatory cosmetic procedures at Dr. Manolakakis' facility. The large number of surgical procedures performed by graduating residents spans the full spectrum of oral and maxillofacial surgery. Graduates are well equipped to enter practice, and are well prepared to begin the process of board certification. In addition, senior residents spend two days each month performing dentoalveolar surgery at Mountainside Hospital's dental clinic under the supervision of a faculty member.

MD Option

Residents in good standing, who are interested in acquiring an MD degree, may sit for USMLE Step 1 with conditional acceptance to an affiliated Medical School. With satisfactory performance on Step 1, and upon successful completion of the OMS program, residents are eligible to enter medical school with advanced standing.

Faculty

The faculty consists of three full-time, one half-time and 14 part-time board certified oral and maxillofacial surgeons attendings. Also included on the teaching faculty are two orthodontists, a craniofacial surgeon, two head & neck surgeons, a maxillofacial prosthodontist and several restorative dentists.

Hillel Ephros, DMD, MD, Chairman and Program Director
Richard P. Szumita, DDS, Associate Program Director and Associate Chairman
Michael Erlichman, DDS, Assistant Program Director
Michael Awadallah, DDS, MD, Chief, Oral and Maxillofacial Surgery Service, VANJHCS
Manolis Manolakakis, DMD, Fellowship Director, Facial Cosmetic Surgery, MMC and CAOFS
Scotty Bolding, DDS, Director, Airway and Temporomandibular Joint Surgery

OMS faculty members

Eshansh Arora, DDS Shahid Aziz, DDS, MD Meredith Blitz, DDS Sung Cho, DMD

Non-OMS faculty members

Jung Kim, DDS (orthodontics) Lawrence Simon, DDS (orthodontics) Shayna Avinoam, DDS (cleft/craniofacial orthodontics) David Folk, MD, (otolaryngology/H&N surgery) Robert DeFalco, DDS James LaBagnara, MD (otolaryngology/H&N surgery)

Ivan Georgiev, DMD Christen Caloway, MD (pediatric otolarybgology/H&N surgery)

Robert (Joey) Herrod, DMD Silvio Podda, MD (plastics/craniofacial surgery)

Mendel Markowitz, DDS

Vito Modugno, DMD Asmahan Khater, DDS (prosthodontics)

Erwin, Park, DDS, MD

Anthony Sallustio, DDS (maxillofacial prosthodontics)

Ryan Richards, DDS (cosmetic fellowship trained)

Imad Tamimi, DMD

Section 1 - Patient Assessment

Material for this section is derived from the following elements in the resident curriculum:

Weekly didactic schedule and grand rounds

Introductory course in physical diagnosis

Off-service rotations

Physical Diagnosis – Family Medicine

Medicine/MICU

Anesthesiology

General Surgery/SICU

(The cumulative patient assessment experience far exceeds the recommended 4 weeks)

On-service experience (SJUMC, VANJHCS, MMC)

ER

Admitted and ambulatory patient care

Rounds

ACLS and PALS Courses

ATLS Course

Goals

- 1. to develop proficiency in history taking regarding a maxillofacial chief complaint;
- 2. to develop proficiency in examining the maxillofacial regions;
- 3. to develop a group of core competencies which are indices of resident achievement in this area (see below):
- 4. to expose the resident to the evaluation and management of patients with complex medical histories and those who are acutely ill.

Core Competencies*

(* number listed with each item represents the target year for achieving competency)

- 1. taking a patient history (1)
- 2. performing a complete physical examination (1)
- 3. ordering and interpretation of standard laboratory tests (1)
- 4. accurate assessment of the emergency room patient (1)
- 5. performing a preanesthetic evaluation and appropriately assigning an ASA classification (2)
- 6. performing an inpatient postoperative assessment (2)
- 7. ordering and interpretation of special/advanced laboratory tests (2)
- 8. ordering and interpretation of appropriate maxillofacial imaging studies (2)

9. performing a presurgical evaluation and appropriately assigning risk (2)

Objectives

- 1. perform accurate medical risk assessment on over 200 outpatients
- 2. perform preanesthetic evaluations on over 200 outpatients
- 3. admit over 200 patients to the oral and maxillofacial surgery service
- 4. evaluate and manage over 200 patients in the emergency room
- 5. successfully complete all elements of the physical diagnosis program
- 6. successfully complete the patient examination at the conclusion of the medicine rotation
- 7. successfully complete the rotations in internal medicine and general surgery/ICU
- 8. successfully complete ACLS, PALS and ATLS and maintain certification throughout the duration of the training program.

Section 2 - Anesthesia

Material for this section is derived from the following elements in the resident curriculum:

Weekly didactic schedule and grand rounds

Off-service rotations

Physical Diagnosis – Family Medicine

Anesthesiology

General Surgery/SICU

On-service experience (SJUMC, VANJHCS)

Local anesthesia and nitrous oxide

Adult conscious sedation

Pediatric conscious sedation

Adult deep sedation/GA

Pediatric deep sedation/GA

ACLS and PALS

Goals

- 1. to develop proficiency in the management of pain and anxiety;
- 2. to develop a group of core competencies which are indices of resident achievement in this area (see below);
- 3. to expose the resident to the evaluation and anesthetic management of patients with complex medical histories and those who are acutely ill or seriously injured.

Core Competencies*

(* number listed with each item represents the target year for achieving competency)

- 1. performing a preanesthetic evaluation and appropriately assigning an ASA classification (2)
- 2. complete and proper preparation of the ambulatory patient for sedation or GA (2)
- 3. complete and proper preparation of facilities and equipment for sedation or GA (2)
- 4. appropriate postanesthetic monitoring and discharge evaluation (2)
- 5. safe and effective administration of parenteral sedation agents (3)
- 6. safe and effective administration of general and dissociative anesthetics (4)

7. prompt recognition and management of minor and major anesthesia-related complications (4)

Objectives

- 1. perform preanesthetic evaluations on over 200 adult outpatients
- 2. perform preanesthetic evaluations on over 200 adult inpatients
- 3. perform preanesthetic evaluations on over 100 pediatric patients
- 4. administer conscious sedation to over 200 adult patients
- 5. administer general anesthesia to over 200 adult patients
- 6. administer sedation, dissociative anesthesia and/or general anesthesia to over
- 40 pediatric patients
- 7. successfully complete the rotations in anesthesiology and pediatric anesthesiology
- 8. successfully complete ACLS and maintain certification throughout the duration of the training program
- 9. demonstrate supplemental local anesthetic techniques used as alternatives to conventional blocks and infiltrations.
- 10. demonstrate appropriate patient management when administering nitrous oxide/oxygen.

Section 3 - Dentoalveolar Surgery

Material for this section is derived from the following elements in the resident curriculum:

Weekly didactic schedule and grand rounds

On-service experience (SJUMC, VANJHCS, MMC, MH)

Outpatient clinics

OR cases

Rounds

Head and Neck Anatomy Course

Goals

- 1. to develop proficiency in the extraction of teeth and associated surgical procedures;
- 2. to develop a group of core competencies which are indices of resident achievement in this area (see below);

Core Competencies*

(* number listed with each item represents the target year for achieving competency)1. frenectomy (1)

- 2. incisional and excisional biopsy of soft tissue lesions (1-2)
- 3. surgical management of periodontal and periapical pathologic processes (2)
- 4. maxillary tuberosity reduction (2)
- 5. surgical management of odontogenic infection (2)
- 6. surgical management of intrabony lytic lesions (2-4, depending on size and proximate anatomical structures)
- 7. surgical extraction of impacted teeth (3)
- 8. appropriate use of the CO2 laser in oral soft tissue surgery (3)

- 9. surgical management of unerupted teeth for orthodontic purposes (3)
- 10. removal of maxillary and mandibular tori (3)
- 11. retrieval of root from maxillary sinus via Caldwell-Luc (4)

- 1. perform over 500 extractions of erupted teeth
- 2. perform over 100 extractions of impacted teeth
- 3. perform over 25 minor preprosthetic procedures
- 4. perform over 50 dentoalveolar surgical procedures on children
- 5. perform over 5 apicoectomies
- 6. surgically manage over 10 intrabony lytic lesions of the jaws not associated with dental apical pathology
- 7. perform over 50 incisional and/or excisional biopsies of the dentoalveolar soft and/or hard tissues
- 8. perform over 100 alveoloplasty procedures
- 9. expose and bracket five or more unerupted teeth

Section 4 - Oral and Craniomaxillofacial Implant Surgery

Material for this section is derived from the following elements in the resident curriculum:

Weekly didactic schedule, grand rounds and implant conferences

On-service experience (SJUMC, VANJHCS, MMC)

Outpatient clinics

OR cases

Rounds

Head and Neck Anatomy Course

Goals

- 1. to develop a group of core competencies which are indices of resident achievement in this area (see below);
- 2. to expose the resident to different types of implants and provide experience in placement of screw-type and press fit fixtures;
- 3. to expose the resident to various surgical techniques used to develop or augment implant placement sites;
- 4. to expose the resident to implant-assisted prosthetic rehabilitation of the eye, the ear and other maxillofacial regions outside of the mouth

Core Competencies*

- (* number listed with each item represents the target year for achieving competency)1. conducting a medical and surgical pre-implant evaluation (2)
- 2. ordering and interpretation of maxillofacial imaging that will meaningfully enhance the database available prior to implant placement (2)
- 3. developing an appropriately designed and properly sequenced implant treatment plan in collaboration with restorative dentist (3)
- 4. placement of implants in the edentulous anterior mandible (3)
- 5. placement of implants in other regions of the maxilla and mandible (4)
- 6. the use of bone or bone substitutes as an adjunct to implant placement (4)
- 7. soft tissue procedures adjunctive to implant placement (4)

- 1. place over 50 implants in the jaws and/or other facial bones
- 2. perform over 8 adjunctive surgical procedures with implant placement (staged or simultaneous)
- 3. participate in collaborative treatment planning sessions with restorative dentists
- 4. discuss the rationale and surgical technique for placement of endosseous implants in bones other than the jaws as part of a maxillofacial prosthetic treatment plan

Section 5 - Surgical Correction of Airway and Dentofacial Deformities

Material for this section is derived from the following elements in the resident curriculum:

Weekly didactic schedule and grand rounds

On-service experience (SJUMC, VANJHCS, MMC)

Outpatient clinics

OR cases

Rounds

Craniofacial team meetings and orthognathic conferences

Head and Neck Anatomy Course and Dr. Bolding's didactic and clinical sessions

- 1. to develop a group of core competencies which are indices of resident achievement in this area (see below);
- 2. to expose the resident to a variety of dentofacial deformities for which surgical-orthodontic correction is indicated;

3. to expose the resident to the orthodontic treatment planning of surgical-orthodontic cases.

Core Competencies*

(* number listed with each item represents the target year for achieving competency)

- 1. identification of patients who may benefit from orthognathic surgery (1)
- 2. airway assessment and evaluation for sleep-disordered breathing (3)
- 3. developing a diagnostic database and treatment plan for orthodontic-surgical correction (4)
- 4. application of rigid fixation in orthognathic surgery (3)
- 5. performing mandibular ramus osteotomies (4)
- 6. performing osteotomies of the maxilla for RPE or other distraction cases (4)
- 7. performing mandibular osteotomies for chin movements (4)
- 8. performing osteotomies of the maxilla for segmental LeFort I surgery (4)
- 9. use of autogenous bone grafting and bone substitutes in orthogoathic surgery (4)

Objectives

- 1. comprehensively manage over 10 patients with airway / dentofacial deformities
- 2. perform over 15 mandibular osteotomies
- 3. perform over 15 maxillary osteotomies
- 4. perform 5 additional osteotomies for segmental procedures, genioplasty etc.

Section 6 - Cleft Lip and Palate and Craniofacial Anomalies

Material for this section is derived from the following elements in the resident curriculum:

Weekly didactic schedule and grand rounds

On-service experience (SJUMC)

Outpatient clinics

OR cases

Rounds

Craniofacial team meetings and orthognathic conferences

Off-service experience with craniofacial surgeon

Head and Neck Anatomy Course

Goals

- 1. to develop a group of core competencies which are indices of resident achievement in this area (see below);
- 2. to expose the resident to a wide variety of craniofacial anomalies and their management;
- 3. to expose the resident to the full spectrum of surgical procedures indicated in the management of cleft lip and palate
- 4. to expose the resident to team management of craniofacial anomalies

Core Competencies*

(* number listed with each item represents the target year for achieving competency)

- 1. identification of patients with craniofacial anomalies (1)
- 2. describing the relationship between the structural components of the maxillofacial regions and critical functions such as ventilation, swallowing and speech (2)
- 3. describing the different techniques for cleft lip repair with their advantages and disadvantages (3)
- 4. describing the different techniques for cleft palate repair with their advantages and disadvantages (3)
- 5. harvesting bone graft from the anterior iliac crest in pediatric patients (3)
- 6. comprehensive management of the residual alveolar cleft with bone grafting (4)
- 7. participation in the team evaluation and management of patients with craniofacial anomalies (4)

Objectives

- 1. perform 5 anterior iliac crest bone harvestings in pediatric patients
- 2. bone graft 5 residual alveolar clefts
- 3. participate in 8 cleft lip repairs, cleft palate repairs and/or pharyngoplasties
- 4. describe the indications for, technique for and timing of costochondral graft reconstruction in craniofacial microsomia

Section 7 - Trauma Management

Material for this section is derived from the following elements in the resident curriculum:

Weekly didactic schedule and grand rounds

On-service experience (SJUMC, VANJHCS)

Outpatient clinics

OR cases

ER

Rounds

Off-service rotations

Physical Diagnosis – Family Medicine General Surgery/SICU

ATLS

Head and Neck Anatomy Course

Goals

- 1. to develop proficiency in the initial assessment and emergency management of patients with maxillofacial injuries;
- 2. to develop proficiency in the management of mandibular fractures and competency in the diagnosis, treatment planning and operative management of all facial fractures;
- 3. to develop a group of core competencies which are indices of resident achievement in this area (see below)

to expose residents to the full spectrum of hard, soft and specialized tissue injuries to the maxillofacial and associated regions

Core Competencies*

(* number listed with each item represents the target year for achieving competency)

- 1. utilizing splinting techniques for dentoalveolar trauma (1)
- 2. repair of simple facial lacerations (1)
- 3. performing closed reduction of isolated nasal fractures (2)
- 4. ordering and interpretation of appropriate imaging to assist in the diagnosis and treatment planning of patients with maxillofacial injuries (2)
- 5. repair of complex facial lacerations (2-3)
- 6. performing ORIF of the fractured mandible (3)
- 7. performing ORIF of the fractured ZMC complex (4)
- 8. repairing orbital blow out fractures (4)
- 9. comprehensive management of the panfacial fracture patient (4)
- 10. surgical management of frontal sinus injuries (4)

Objectives

- 1. describe the signs and symptoms of mandible fractures
- 2. describe the signs and symptoms of midfacial fractures
- 3. repair 50 facial lacerations
- 4. perform 50 closed reductions of fractured mandibles
- 5. perform 20 ORIF of fractured mandibles
- 6. perform 20 ORIF of midfacial fractures
- 7. participate in the management of two or more patients with frontal sinus injuries
- 8. participate in the comprehensive management of five or more trauma patients with multiple injuries

Section 8 - Surgical & Nonsurgical Management of TMD

Material for this section is derived from the following elements in the resident curriculum:

Weekly didactic schedule and grand rounds
On-service experience (SJUMC, VANJHCS, MMC)
Outpatient clinics
OR cases
Rounds
TMJ didactic and clinical sessions with Dr. Bolding

Head and Neck Anatomy Course

Goals

- 1. to develop proficiency in the initial assessment of patients with complaints of orofacial pain and/or temporomandibular dysfunction
- 2. to develop a group of core competencies which are indices of resident achievement in this area (see below)
- 3. to expose residents to a variety of surgical procedures which may be indicated in the management of TMD

Core Competencies*

(* number listed with each item represents the target year for achieving competency)

- 1. identifying patients who may benefit from treatment of orofacial pain and/or TMD symptoms (1)
- 2. developing a nonsurgical treatment plan for these patients (2)
- 3. recommending surgical treatment only when appropriate and indicated by recognized standards of care (3)
- 4. developing a surgical treatment plan for the TMD patient (4)
- 5. comprehensive management of the TMJ surgery patient (4)

- 1. list indications for operative management of patients with orofacial pain/TMD
- 2. discuss imaging modalities useful in the evaluation of TMD
- 3. accurately interpret MR images of normal and deranged TM joints
- 4. perform two or more arthroscopic procedures
- 5. perform three or more open joint surgical procedures
- 6. describe the indications for joint replacement using alloplastic materials

Section 9 - Diagnosis and Management of Pathologic Conditions

Material for this section is derived from the following elements in the resident curriculum:

Weekly didactic schedule and grand rounds and lectures by oral pathologist

Monthly pathology lecture series by Dr. Erlichman

Tumor board

On-service experience (SJUMC, VANJHCS, MMC)

Outpatient clinics

OR cases

Rounds

Off-service rotations

Pathology

Physical Diagnosis – Family Medicine

Goals

- 1. to develop proficiency in the diagnosis and management of common pathologic entities of the oral cavity and associated tissues;
- 2. to develop a group of core competencies which are indices of resident achievement in this area (see below);
- 3. to expose the resident to a wide variety of pathologic entities of the maxillofacial regions;4. to expose the resident to the oral manifestations of a wide variety of systemic conditions which may impact upon oral health

Core Competencies*

- (* number listed with each item represents the target year for achieving competency)1. developing a differential diagnosis (1)
- 2. appropriately selecting and utilizing a biopsy technique for tissue diagnosis (1)
- 3. ordering and interpreting imaging that provides meaningful information regarding a maxillofacial pathologic lesion (2)
- 4. comprehensive management of patients with benign, non-aggressive cysts and tumors (2)
- 5. comprehensive management of patients with benign, aggressive lesions of the jaws (3)
- 6. comprehensive management of patients with submandibular sialolithiasis (3)
- 7. comprehensive management of patients with head and neck malignancy (4)
- 8. prevention, diagnosis and management of osteoradionecrosis (4)
- 9. comprehensive management of patients with mandibular osteomyelitis (4)
- 10. providing a description of a histopathologic slide and correlating with clinical information (4)

- 1. perform 25 biopsies
- 2. use a toluidine blue staining technique on 6 patients
- 3. surgically manage over 10 benign soft tissue lesions
- 4. surgically manage over 10 benign intrabony cysts and/or tumors of the jaws
- 5. surgically manage over 10 patients with significant infections of the head and neck

- 6. treat 4 or more children with maxillofacial pathologic conditions
- 7. treat 2 or more patients with osteonecrosis or osteomyelitis of the jaws
- 8. describe the relative merits and potential disadvantages of surgery and radiation therapy as primary modalities in the treatment of stage I SCCA
- 9. diagnose and medically manage oral mucosal disease in 5 or more patients
- 10. provide a satisfactory description of a histopathologic slide of a pathologic entity from the maxillofacial regions

Section 10 - Reconstructive Surgery

Material for this section is derived from the following elements in the resident curriculum:

Weekly didactic schedule and grand rounds

On-service experience (SJUMC, VANJHCS, MMC)

Outpatient clinics

OR cases

Rounds

Off-service rotations

Physical Diagnosis – Family Medicine

Head and Neck Anatomy Course

Goals

- 1. to develop a group of core competencies which are indices of resident achievement in this area (see below);
- 2. to expose the resident to a wide variety of acquired and congenital deformities requiring reconstruction
- 3. to expose the resident to a wide variety of reconstructive materials and techniques
- 4. to expose the resident to the harvesting of autogenous tissues from a variety of donor sites

Core Competencies*

(* number listed with each item represents the target year for achieving competency)1. identification of patients for whom reconstruction is indicated (1)

- 2. developing a sound reconstructive treatment plan (2)
- 3. harvesting split thickness skin and other soft tissue grafts (2)
- 4. harvesting bone from the anterior iliac crest (3)
- 5. comprehensive management of patients with mandibular continuity defects (4)
- 6. comprehensive management of patients with severe atrophy of the mandible/maxilla (4)

- 1. harvest 4 or more skin or other soft tissue grafts
- 2. harvest 10 or more bone grafts from extraoral donor sites
- 3. participate in 5 or more mandibular reconstruction cases
- 4. describe the relative merits of prosthetic rehabilitation and biologic reconstruction for defects of the maxilla
- 5. list the indications and contraindications for reconstruction of acquired defects of the frontal bone
- 6. participate in 4 or more cases of reconstruction of defects in the maxillofacial region other

than the mandible

7. participate in 4 or more preprosthetic reconstructive surgery cases

Section 11 - Cosmetic Maxillofacial Surgery

Material for this section is derived from the following elements in the resident curriculum:

Weekly didactic schedule and grand rounds

On-service experience (SJUMC, MMC)

Outpatient clinics

OR cases

Rounds

Off-service cosmetic experiences at SJUMC

Rotation with Dr. Manolakakis

Head and Neck Anatomy

Goals

- 1. to develop a group of core competencies which are indices of resident achievement in this area (see below);
- 2. to expose the resident to a variety of conditions which are associated with suboptimal facial esthetics
- 3. to expose the resident to procedures used in the enhancement of facial cosmesis

Core Competencies*

(* number listed with each item represents the target year for achieving competency)1. identification of patients who may benefit from cosmetic maxillofacial surgery (1)

- 2. developing a rational treatment plan for patients with desiring facial rejuvenation (3)
- 3. developing a rational treatment plan for patients with cervicofacial soft tissue redundancy (3)
- 4. developing a rational treatment plan for children and adults with external ear deformities (4)
- 5. comprehensive management of patients with chin deformities (4)

- 1. surgically manage 4 or more patients with chin deficiencies
- 2. describe the indications, contraindications and basic techniques for surgical management of:
- a. cervicofacial soft tissue redundancy
 - b. facial scars and other soft tissue deformities
 - c. maxillofacial lipomatosis

- d. eyelid deformities
- e. nasal deformities
- f. facial rhytids
- 3. discuss the recognition and management of complications associated with each of the above procedures

Didactic Program

The formal didactic program has several components. Grand Rounds are held monthly at SJUMC and are attended by all on-service residents as well as available faculty and guests. At each of these evening sessions, two hours are devoted to a lecture by a guest presenter or faculty member. Topic/speaker selection is guided by results of needs assessment surveys, past performance on OMSITE exams, the requests of residents and speaker availability. Weekly seminars led by Dr. Szumita and other attendings also take place at each training site following a comprehensive 52 week cycle that repeats annually. Retrospective case reviews, CPCs, morbidity and mortality sessions and journal clubs are also included in the formal didactic schedule. Dr. Erlichman provides an oral pathology lecture for all residents in the department monthly following a repeating annual curriculum. Didactic time is also devoted to implant treatment planning, craniofacial growth and development, orthodontics, risk management, ethics, nomenclature and coding and other pertinent topics. The most difficult part of the didactic curriculum to document is the piece that may have the most profound effect on the residents. This is the ongoing exchange of ideas that takes place on rounds as well as chairside and tableside every day.

Off-Service Rotations

Physical Diagnosis – Family Medicine

Drs. Shideh Doroudi and Michael DeLisi

This first year rotation follows an introductory course in history taking and physical examination required of all incoming PGY1 Residents in the Department of Dentistry. OMS residents spend two weeks assigned to family medicine performing H&Ps under supervision and making rounds.

- 1. to contribute to the development of competency in history taking
- 2. to contribute to the development of competency in performing complete physical examinations

- 3. to expose the resident to the major areas in clinical medicine
- 4. to provide a basis for the clinical judgment required when evaluating patients prior to surgery and anesthesia
- 5. to expose residents to published guidelines on preoperative physical assessment and on the management of major entities such as diabetes and hypertension

- 1. the resident will satisfactorily complete and document 25 H&Ps
- 2. the resident will be able to demonstrate the correct use of the tools of physical diagnosis
- 3. the resident will be able to discuss published guidelines on preoperative physical assessment and on the management of major entities such as diabetes and hypertension

Note: Along with the introductory course and the eight-week rotation in the Department of Medicine, this rotation provides core training in physical diagnosis. Certification of competence in performing H&Ps is based upon successful completion of this rotation as judged by Drs. Doroudi and DeLisi as well as by satisfactory performance during the medicine rotation. Additional training is acquired by performing pre-anesthetic evaluations during the anesthesia rotation. Given satisfactory performance on all of these elements and a positive recommendation by the OMS faculty, the graduating resident will have his/her competency in physical diagnosis certified by the program director.

Anesthesiology

Drs. S. Landa, P Upadya and S. Winikoff (SJ)

This is a 22-week rotation during the resident's first year. A committed group of clinician-educators and a large group of residents staff the anesthesiology service at St. Joseph's. Subspecialties represented include pediatric anesthesiology, cardiac anesthesiology, OB anesthesiology and pain management. The OMS resident is absorbed into this academically oriented environment and participates fully in all educational activities. On Wednesdays, when the rotating resident returns for OMS didactics and to run sedations in the OMS clinic, the assignment to the anesthesia service begins at 4 PM and concludes by midnight. This ensures that the first year resident does not miss core didactics and provides experience in the management of emergent patients requiring anesthesia. Two weeks of the assignment are devoted to pre-anesthetic assessment and risk stratification and four weeks focus on anesthesia management of children under the age of 13. The resident also participated in the provision of sedation and general anesthesia for older and medically fragile patients.

Duties - The resident is expected to fulfill the responsibilities that would be assigned to a resident in Anesthesiology at a comparable level. This includes attendance at seminars and conferences and full participation in any activities of the service. Overnight call is not required as it mandates loss of the following day. The Wednesday evening shift ending before midnight serves the same purpose and allows the resident to work the following day so that the rotation is truly full time.

- 1. to contribute to the development of competency in medical risk assessment
- 2. to contribute to the development of competency in airway management
- 3. to contribute to the development of competency in the administration of anesthetic agents
- 4. to contribute to the development of competency in establishing venous access

- 5. to expose the resident to fluid management and blood replacement
- 6. to expose the resident to the use and significance of invasive monitoring techniques
- 7. to expose the resident to the anesthetic management of patients at both age extremes

- 1. perform 25 or more pre-anesthetic evaluations of surgical patients scheduled for general anesthesia (adults and children)
- 2. describe the process of assigning risk categories to patients scheduled to receive anesthetics
- 3. establish venous access in over 50 patients
- 4. satisfactorily manage the airway in 50 or more patients under general anesthesia (adults and children)
- 5. discuss issues in the anesthetic management of patients at the age extremes
- 6. describe the standard physiologic monitoring used during general anesthesia and the significance of the various measures
- 7. participate in the PACU care and discharge process for 25 or more patients who have undergone a procedure under general anesthesia
- 8. participate in the anesthesia management of 12 or more geriatric patients and 15 or more medically compromised patients (ASA III or IV)
- 9. describe the pharmacologic properties, clinical applications, contraindications, adverse reactions and potential interactions for:
 - a. anesthetic gases
 - b. intravenous anesthetic agents
 - c. sedatives and anxiolytics
 - d. opioids
 - e. muscle relaxants
 - f. reversal agents
 - g. local/regional anesthetics
 - h. adjunctive agents (vasopressors, blood pressure lowering medications etc.)

General Surgery / SICU Drs. D. Christian, B. Rebein and M. Connolly (SJ)

This rotation 18 weeks duration takes place at SJUMC where the OMS resident is fully absorbed onto the general surgery service and functions as a team member including participation in the call schedule. For the first three months, the emphasis is clinical and a large volume and wide variety of surgical cases are encountered. The resident then spends the final month as a surgical intensive care unit resident. Here, didactic elements are reinforced daily on teaching rounds and by the nearly constant contact of the OMS resident with surgical intensivists who run the SICU, with general surgery attendings whose patients are in the unit and with senior level general surgery residents.

Duties - The resident is expected to fulfill the responsibilities that would be assigned to a resident in General Surgery at a comparable level. This includes attendance at seminars and conferences, full participation in any activities of the service and participation in the on call schedule.

- 1. to contribute to the development of competency in surgical risk assessment
- 2. to contribute to the development of competency in evaluation and management of the trauma victim
- 3. to contribute to the development of competency in basic surgical skills
- 4. to contribute to the development of competency in medically managing the perioperative patient
- 5. to expose the resident to the establishment of central venous access
- 6. to expose the resident to fluid management and blood replacement
- 7. to expose the resident to the medical management of the critically ill surgical patient

- 1. participate meaningfully in the comprehensive surgical management of 25 or more (non-OMS) surgical patients
- 2. participate meaningfully in the comprehensive management of 12 or more trauma victims
- 3. demonstrate satisfactorily the acquisition of basic surgical skills
- 4. describe all the anatomy imaged on a standard chest film and identify common pathologic findings noted on these films in surgical patients
- 5. participate meaningfully in the comprehensive care of 10 patients admitted to the SICU
- 6. list the indications for mechanical ventilation and the parameters for weaning patients off of the ventilator
- 7. discuss the indications and techniques for establishment of emergent and non-emergent surgical airways

Internal Medicine/MICU Drs. R. Solis, P. Michael, M. Singhal & M. Ismail (SJ)

This 8-week rotation takes place at SJUMC. During the first six weeks, the OMS resident is fully absorbed onto the medicine service and participates in all of its clinical and educational activities including the on call schedule. The resident is assigned to a team that follows patients from admission through discharge. The team is composed of senior and junior residents as well as medical students. Each team is supervised by attending physicians from the Department of Medicine. The final two weeks are spent in MICU with the resident fully engaged in the unit's activities and scheduled accordingly.

Duties - The resident is expected to fulfill the responsibilities that would be assigned to a resident in Internal Medicine at a comparable level. This includes attendance at seminars and conferences, full participation in any activities of the service including the code team and meaningful participation in the on call schedule as well as full participation as a unit resident when assigned to MICU.

Goals

1. to contribute to the development of competency in history taking

- 2. to contribute to the development of competency in conducting a complete physical examination
- 3. to expose the resident to a wide variety of medical conditions that may require treatment
- 4. to provide clinical material for further development of physical diagnosis skills acquired in Family Medicine.
- 5. to expose the resident to medical urgencies and emergencies and their management
- 6. to expose the resident to critically ill patients and their management

- 1. participate meaningfully in the comprehensive management of 10 medical patients
- 2. evaluate and manage 5 or more patients with critical illness
- 3. participate in the management of patients with conditions that may include:
 - a. cardiac arrhythmias
 - b. respiratory failure
 - c. hypertenisve emergencies
 - d. septic shock
 - e. DKA
 - f. CVA
- 4. discuss the pathophysiology, clinical manifestations and management of major disease processes which may include:
 - a. asthma
 - b. pneumonia
 - c. hypertension
 - d. ischemic heart disease
 - e. congestive heart failure
 - f. valvular heart disease
 - g. diabetes mellitus
 - h. thyroid dysfunction
 - i. hyperparathyroidism
 - j. tuberculosis
 - k. hepatitis
 - 1. alcoholic liver disease and cirrhosis
 - m. congenital and acquired coagulopathies
 - n. bleeding diatheses
 - o. Crohn's disease and ulcerative colitis
 - p. peptic ulcer disease
 - a. sarcoidosis
 - r. rheumatoid arthritis
 - s. psoriasis
 - t. myasthenia gravis
 - u. multiple sclerosis
- v. primary malignancies of the lungs, stomach, pancreas, colon, rectum, prostate, breast, esophagus, liver and kidney
 - w. anemias
 - x. leukemias
 - y. lymphomas

Otolaryngology/Head&Neck Surgery Drs. D Folk, C. Caloway and J. LaBagnara (SJ)

This 4-week rotation takes place at SJUMC where the OMS resident is fully absorbed onto the H&N surgery service and functions as a team member with total commitment to the service.

Duties - The resident is expected to fulfill the responsibilities that would be assigned to any rotating surgical resident at a comparable level. This includes full participation in any activities of the service and participation in after-hours care/call as indicated.

Goals

- 1. to enhance the resident experience in head and neck surgery that overlaps with OMS
- 2. to contribute to the development of competency in evaluation and management of the trauma victim
- 3. to contribute to the development of competency in basic surgical skills
- 4. to contribute to the development of competency in the management of benign and malignant pathologic lesions of the head and neck
- 5. to contribute to the development of familiarity with head and neck surgery beyond the usual scope of OMS

Objectives

- 1. participate meaningfully in the surgical management of 10 or more head and neck surgery patients
- 2. participate meaningfully in the establishment of surgical airways in 3 or more patients
- 3. demonstrate satisfactorily the acquisition of basic surgical skills
- 4. discuss principles of ablative surgery for head and neck malignancies and the various options for reconstruction
- 5. describe the management of injuries involving specialized structures including the parotid gland and ductal system, facial nerve and the ear

Reconstructive and Cosmetic Surgery

Dr. Manolis Manolakakis

During this 4-week rotation, the resident is expected to spend time at MMC and at Dr. Manolakakis' facility for the purpose of exposure to all phases of cosmetic OMS including preop visits, post-op visits as well as procedures. The resident shadows Dr. Manolakakis and his cosmetic surgery fellow and participates in patient care at the ambulatory facility and plays a significant role in major OR cases done at MMC. The duties of the resident are based on the nature of the rotation and may not involve on call for this month.

- 1. to expose the resident to office-based maxillofacial cosmetic procedures;
- 2. to contribute to the development of competency in the pre-operative evaluation of the patient seeking facial esthetic surgery;
- 3. to expose the resident to esthetic adjunctive procedures utilized in the practice of OMS;

4. to expose the resident to the post-operative management of patients who have had maxillofacial cosmetic procedures;

Objectives

- 1. participate meaningfully in the comprehensive surgical management of 4 or more cosmetic surgical patients;
- 2. participate meaningfully in the comprehensive management of 4 or more patients receiving esthetic enhancements;
- 3. describe the evaluation process for patients seeking elective, esthetic facial surgery including medical, psychological and surgical assessments;
- 4. describe the surgical approaches and techniques for common cosmetic procedures including brow lift, upper and lower blepharoplasty, rhinoplasty, rhytidectomy, skin resurfacing procedures and submental liposuction;
- 5. discuss the preparation for these procedures and the management of their common complications.

Rotation Evaluations

Residents are evaluated by the individuals named above (or their designees) for each rotation. Off service mentors are asked to evaluate residents based upon the goals and objectives that are supplied prior to the arrival of an assigned resident. Off-service chiefs are periodically asked to comment on these goals and objectives and provide their opinions about the value of the rotation and its success in meeting its stated goals. In addition, clinical rotations are evaluated by each resident at the conclusion of each rotation.

Head and Neck Anatomy

Richard Szumita, DDS

This is an intensive 16-hour program in head and neck anatomy sponsored three times annually by St. Joseph's University Medical Center. This limited attendance program consists of lecture and cadaveric dissection. OMS residents are scheduled to participate in this program twice during their period of training.

Goals

- 1. to provide a comprehensive review of structural and functional relationships in the head and neck
- 2. to provide an anatomical basis for approaching oral and maxillofacial surgical procedures

Objectives

- 1. identify blood vessels in the head and neck and discuss their functional significance
- 2. identify muscles in the head and neck and discuss their functional significance
- 3. identify skeletal structures of the head and neck and discuss their functional significance
- 4. discuss the functions of the twelve cranial nerves and the structures they innervate
- 5. describe the fascia of the head and neck and its significance
- 6. discuss the anatomy and physiology of the temporomandibular joint
- 7. discuss the anatomy and physiology of the eyes, ears and nose

Temporomandibular Joint Disorders: Diagnosis and Management Scotty Bolding, DDS
This curriculum element was developed to enhance resident understanding of the anatomy,

physiology and dynamics of the TMJ and the interconnections among occlusion, jaw relationship, the surrounding soft tissues and the joint itself. The goal is to provide an evidence-based platform for residents to comprehensively evaluate and manage their patients so that joint health and airway integrity are the context for all oral and maxillofacial surgical interventions. The clinical component is designed to enhance residents' exposure to and experience with TMJ arthroplasty and total joint replacement.

Objectives

- 1. conduct comprehensive evaluation of patients with temporomandibular joint complaints
- 2. order and interpret diagnostic tests necessary to develop a treatment plan for these patients
- 3. participate in surgical management of patients requiring arthroplasy
- 4. participate in surgical management of patients requiring total joint replacement
- 5. conduct nonsurgical management of patients with TMJ-related conditions

Veterans Administration

M. Awadallah, DDS, MD/M Erlichman DDS

The VA rotation in each resident's second year is designed to meet the following goals:

- 1. Exposure to patients with medical fragility
- 2. Experience with dental extractions and alveoloplasty and
- 3. Experience with soft tissue procedures to prepare for conventional and/or implant restorations
- 4. Experience with dental implant placement

Objectives

At the conclusion of the VA rotation, the resident will have:

- 1. Participated in the pre-operative evaluation of 25 patients with underlying medical conditions of significance
- 2. Conducted 50 dentoalveolar surgical procedures including extractions, alveoloplasty, soft tissue manipulations and bone grafting
- 3. Participated in the interdisciplinary treatment planning of 25 patients requiring dental implants
- 4. Placed 65 dental implants for single unit and multiple unit restorations/prostheses
- 5. Enhanced their level of competency and confidence as monitored and validated by VA faculty

HMH/Mountainside Medical Center

M. Erlichman DDS.A. Wojcik, DDS

Mountainside rotation days are designed to provide residents a one-on-one dentoalveolar surgery experience under the mentorship of Dr. Erlichman to enhance confidence and skills particularly in the removal of impacted teeth.

- 1. To do the pre-op evaluation for twenty candidates for dentoalveolar surgery
- 2. To extract twenty difficult third molar teeth
- 3. To participate in the management of ten patients who require biopsy, hard or soft tissue site development, implant placement or minor pre-prosthetic surgery

Scholarly Activities

Residents are required to participate on an ongoing basis in scholarly activity. Those activities may include: research - clinical or laboratory based, case reports for publication in the literature, production of abstracts for publication and/or presentation at major meetings and the presentation of educational programs in the hospitals, in study groups and/or at community functions. Study design and statistical analysis are included in the didactic curriculum and a statistician/educator is on site and available to assist in protocol development and the analysis of study results.

Goals

- 1. to contribute to the development of competency in scientific writing
- 2. to contribute to the development of competency in scientific oral presentation
- 3. to expose the resident to clinical research and statistical analysis

Objectives

- 1. to complete one paper suitable for publication in a peer reviewed journal, or
- 2. to present one paper or abstract at a regional or national meeting, and/or
- 3. to discuss the scientific literature in a way that reflects a clear understanding of study design, statistical analysis and result interpretation
- 4. to demonstrate ongoing involvement with scholarly activity by, at a minimum, annual participation in the St. Joseph's Research Day.

OMSITE and Mock Boards

Mock boards participation is a program requirement. Administered each spring, they are designed to follow the format of the oral certifying examination. Each resident is also required to participate annually in the OMSITE, an ABOMS sponsored evaluation mechanism. Results of these assessments are used to direct and focus resident study and to guide ongoing development of the program's curriculum.

OVERALL PROGRAM GOALS

- To provide intensive training leading to competency, and ultimately, after additional experience in practice, to
 proficiency in the core components of oral and maxillofacial surgery: history taking and physical
 examination, dentoalveolar surgery, and anesthesia services including local, inhalation analgesia, all forms
 of sedation and general anesthesia;
- To provide comprehensive training in the full spectrum of oral and maxillofacial surgery so that program graduates are able to competently practice the full scope of the specialty and are well prepared to enter fellowships if they choose to sub-specialize;
- To deliver a didactic program that is multifaceted and that integrates basic and clinical sciences at a level
 well above pre-doctoral education so that residents are prepared to utilize that knowledge in clinical practice
 and to succeed on standardized test including the OMSITE and the written qualifying examination of the
 ABOMS;
- 4. To conduct a program with faculty members who provide mentorship and set appropriate examples for residents in their dedication to patient care, to the specialty and to lifelong learning, community service and teaching;

5.	anonymously as well as openly and by utilizing the input of current and past residents to help shape and refine the residency program; and,
6.	To foster an environment conducive to learning and an open exchange of ideas, promoting scholarly activity and a thoughtful approach to clinical and philosophical questions related to the practice of the specialty.