Basic Maxillofacial Principles and Techniques

August 19-21, 2011

University of Pennsylvania

School of Medicine

Philadelphia, PA

SYNTHES® CMF

Supported by an educational grant from Synthes

A Word from the Chairmen

Thank you for your interest in the ASMS Basic Maxillofacial Principles and Techniques Course. We are proud to be part of this dynamic educational program jointly sponsored by the American Society of Maxillofacial Surgeons and the Maxillofacial Surgeons Foundation.*

We hope you enjoy the course.

Joseph Losee, MD • Donald Mackay, MD, DDS • Warren Schubert, MD • Jesse Taylor MD
Local Host: Joseph Serletti, MD

* The American Society of Maxillofacial Surgeons (ASMS) is the oldest American organization representing maxillofacial surgeons who are devoted to improving and promoting the highest levels of patient care.

The Maxillofacial Surgeons Foundation (MSF) was formed in 1988 to promote, develop, and conduct educational, scientific and charitable activities related to maxillofacial surgery.

Program

The Basic Course will be held at the University of Pennsylvania, School of Medicine in Philadelphia, Pennsylvania. Lectures will be held at the Biomedical Research Building 2/3 (BRBII/III), Auditorium- Ground floor level - 421 Curie Boulevard, Philadelphia, PA 19104. Lab sessions will take place in Edward J. Stemmler Hall, First Floor, Labs - 106A, 106B and 106C - 3450 Hamilton Walk, Philadelphia, PA. 19104

Please dress casually and comfortably as your clothing will be exposed to the powders and chemicals used during the laboratory sessions each day.

Program Faculty

Stephen Baker, MD, DDS, FACS
Georgetown University

Scott Bartlett, MD
University of Pennsylvania

Christopher Brooks, MD
Brooks Plastic Surgery

Stephen Chidyllo, MD, DDS, FACS
Jersey Shore University Medical Center

Kant Lin, MD
University of Virginia

Joseph Losee, MD, FAAP, FACS
Childrens Hospital of Pittsburgh

Donald Mackay, MD, DDS
Penn State Hershey

Pravin Patel, MD
University of Illinois & Shriners Hospital

Jason Pomerantz, MD
University of California San Fransisco

Warren Schubert, MD
University of Minnesota

Joesph Serletti, MD
University of Pennsylvania

Jesse Taylor, MD
University of Pennsylvania

Andrew Wexler, MD, MA, FACS
Southern California Kaiser Permanente

Faculty subject to change.

Intended Audience

This course is appropriate for all practicing plastic surgeons, residents and other physicians interested in a greater understanding of basic maxillofacial principles and techniques.

Overview

This course is a three-day program consisting of lectures and hands-on laboratory sessions. The goal of this course is to introduce the principles of maxillofacial surgery, with a unique emphasis on the topics of dental anatomy, occlusion, dental impressions, orthodontics and prosthodontics, orthognathic surgery and maxillofacial trauma. Over half of the course is devoted to unique "hands-on laboratories" to teach plastic surgeons the basics of taking impressions and working with dental models, cephalometric analysis, osteotomies and plating techniques. All plastic surgeons should consider taking this course as part of their core curriculum in maxillofacial surgery.

Learning Objectives

Upon completion of this activity, participants will be able to:

- Discuss the anatomy of the head and neck area, especially as related to dental aspects of the oral cavity.
- Take impressions, construct and mount dental models and make acrylic splints.
- Implement current concepts in diagnosis and treatment of facial fractures.
- Incorporate cephalometric prediction tracings and application of orthognathic principles and techniques to diagnose and treat congenital and post-traumatic deformities in their practices.
- Incorporate use of bone cutting equipment and rigid fixation in maxillofacial surgery in their practices.

Housing

The Basic Course will be held at the University of Pennsylvania School of Medicine in Philadelphia, Pennsylvania. ASMS has secured a special group rate at the Inn at Penn of $189 per night. When booking your room, please refer to the ASMS Basic Course to secure this special rate. The cut-off date for this room rate is July 19, 2011.

The Inn at Penn – A Hilton Hotel

3600 Sansom Street
Philadelphia, PA 19104
Phone: (215) 222-0200

Refunds

Cancellations must be in writing to the ASMS/MSF Administrative Office: 900 Cummings Center, Suite 221-U, Beverly, MA 01915. Full refunds, less a $50 service fee, will be given if cancellation is received two weeks prior to the course. Thereafter, a 50% refund will be given after deduction of the service fee. No refunds will be given once the program begins.

Registration

The meeting registration fees include course materials, admission to the session and laboratory fees. All registrants must pay the full registration fee.

Register Online
www.maxface.org/basic

Attendees may also register by submitting the registration form with payment in U.S. funds to the ASMS/MSF Administrative Office. Registration can be submitted by facsimile, phone or mail. Please allow 10 days for the confirmation.

In compliance with the Americans with Disabilities Act, ASMS/MSF will make every reasonable effort to accommodate your needs. For any special request, please call the ASMS/MSF Office at (978) 927-8330 before July 28, 2011.

Future ASMS Courses

September 22, 2011	ASPS/ASMS Symposium “Solutions to Complex Craniofacial Problems: Aesthetic & Reconstructive Surgery” Denver, Colorado
September 25, 2011	ASMS Day at PS2011 Denver, Colorado
February 17-19, 2012	ASMS Basic Course University of San Francisco - San Francisco, California

Friday, August 19, 2011

8:30 am **Registration**
Biomedical Research Building 2/3 (BRBII/III)
Auditorium- Ground floor level
421 Curie Boulevard

9:00 am **Welcome**
- Introduction of course faculty.
- Introduction to ASMS (history, membership, educational activities).
- Course overview.

9:10 am **Housekeeping Issues**
- How did registrants find out about the course?
- Who in their training program do the registrants identify as their ASMS contact?
- Course evaluation forms.
- ASMS application forms.

9:15 am **Oral and Dental Anatomy**
- Mucosa and salivary glands.
- Teeth and supporting structures (pediatric and adult).
- Alveolar bone.
- Occlusion terminology and assessment: centric, rest, overjet, overbite, and masticatory positions.

9:45 am **Use of Dental Splints**

10:00 am **Mandible Trauma & Reconstruction**
- Surgical approaches.
- Mandibular biomechanics.
- Controversy of the use of mini-plates versus large plates, compression plates, lag screws (with discussion of various techniques).
- Mandibular (simple symphyseal, para-symphy seal, body, angle, ramus and condylar).
- Defect mandibular injuries (comminuted, edentulous, segmental defect).
- Teeth in the line of fracture.
- Treatment of avulsed teeth.
- Options for mandibular reconstruction.

11:30 am **Lunch**

12:30 am **Orthognathic Surgery / Orthodontics**

2:30 pm **Coffee Break**

2:45 pm **Cephalometric Analysis**
Participants will learn the practical aspects of cephalometric analysis and surgical treatment prediction.

5:00 pm **Friday Program Concludes.**

Saturday, August 20, 2011

7:00 am **Continental Breakfast**

7:30 am **Garri / Patel Video**

8:00 am **Laboratory Session #1: The Use of Fracture Models and the taking of Dental Impressions:**

FIRST EXERCISE:
1. Discussion of alginate, dental stone, plaster, acrylic, wax bite, typodonts, and articulators.
2. A fracture model of a malunion of a mandible and the corresponding maxilla will be provided. Cut the mandible model to replicate the fracture.
3. Use the maxillary model, mandibular pieces and Play-Doh to re-establish the proper pre-morbid occlusion. You may need to cut or burr the edges of the model in order to remove corners that interfere with re-establishing the proper occlusion.
4. Once the proper occlusion is established, stabilize the reduction mandible fracture with a glue gun, and then with plaster.
5. Mount the maxilla and mandible in the articulator and recheck that you have properly established the pre-morbid occlusion. It should replicate the occlusion of your typodont, from which the models were originally casted.

SECOND EXERCISE:
1. Take dental impressions of each other with alginate.
2. Use dental stone to make dental models of each other. Use the clear plastic molds when you pour these models, so they fit into the articulator.
3. Make wax bite impressions, and mount your own dental models in the articulator with wax bite.

THIRD EXERCISE:
1. Using your own dental models, make an occlusal splint.
2. Using your own dental models, make a lingual and possible palatal splint, so that you are prepared for your next mandible and palatal fracture.

FOURTH EXERCISE:
1. Construction of an acrylic Gunning splint for a typodont that has mandibular incisors, but is otherwise edentulous.

12:45 pm **Lunch**

1:30 pm **Midface Fractures Part I**
- Surgical approaches
- Orbital Fx's and reconstruction (blow-out, blow-in, entrapment)
- Zygomatic Fx's

2:30 pm **ASMS Membership & Benefits**
- Why join?
- Membership application.
- Upcoming courses and meetings.
- Surgical approaches

2:35 pm **Midface Fractures Part II**
- Nasal Fx's
- Naso-Orbital-Ethmoid (N.O.E.)
- Palatal Fx's
- Maxillary (Le Fort I, II, III)
- Palatal Fx's
- Frontal sinus Fx's
- Panfacial Sequencing

3:35 pm **Discussion of fracture plating exercises**
- Video of use of wire and MMF procedures
- Discussion of the use of Porous Polyethylene for facial augmentation

3:45 pm **Coffee Break**

4:00 pm **Laboratory Session #2: Application of Plates & Screws to Mandible & Midface Fractures using Saw Bone Models:**

MANDIBLE FRACTURE EXERCISES:
1. Champy plate for angle fracture
2. Lag screw fixation for symphyseal fracture
3. 'Box plate' for symphyseal fractures
4. Mini-plate for subcondylar fracture
5. 'Locking screw' of a large reconstruction plate for mandibular defect using a template
6. Introduction to trochars for screw placement

MIDFACE FRACTURE EXERCISES:
1. Mini-plates for zygoma fracture
2. Mini-plates for hemi-LeFort I fracture
3. Mesh plate for orbital floor fracture

Use of Porous Polyethylene (PPE) Implants for Facial Augmentation:
1. Orbital sheets
2. Orbital mesh + PPE
3. Temporal implants
4. Malar implants
5. Chin implants
6. Calvarial implants

Use of Typodont for MMF Exercises and Splint Construction:
1. Interdental & intermaxillary wiring techniques (arch bars, Ivy loops, Ernst ligature, interdental wiring, and spanning wire technique for midline fractures)

6:15 pm **Saturday Program Concludes**

Sunday, August 21, 2011

7:00 am **Continental Breakfast**

7:30 am **Videos for Laboratory Session**
- Orthognathic videos of Sabine Girod.

8:00 am **Laboratory Session #3: Osteotomies for Genioplasty and Orthognathic Surgery:**
1. Advancement Genioplasty with plating.
2. Bilateral Sagittal Split Osteotomy, (BSSO), of the mandible with plating & screw fixation.
3. Le Fort 1 Osteotomy & plating.

Resorbable plates demonstration ('one on one' in the lab)

10:00 am **Coffee Break**

10:15 am **Regional Dental Anesthesia**
- Maxillary and Mandibular blocks.
- Complications.

10:45 am **Pediatric Fractures**
- Unique pediatric problems regarding mandible Fx's
- Unique problems regarding pediatric dentition
- Discussion of possible unique needs of splinting for pediatric fractures Midface Fx's
- Controversies regarding pediatric plating and the use of absorbable plates and screws

11:15 am **Pediatric Craniofacial Surgery**

11:45 am **CAD CAM in Orthognathic Surgery**
- Computer Assisted Model Surgery.
- Computer Assisted Jaw Surgery.

12:15 pm **TBD**

12:45 pm **ASMS Course Adjourns**