



BASIC MAXILLOFACIAL PRINCIPLES AND TECHNIQUES

August 3-5, 2012
Northwestern University
Chicago, Illinois

*Sponsored by:
American Society of Maxillofacial Surgeons
Maxillofacial Surgeons Foundation*



Supported by an educational grant from OsteoMed



www.maxface.org

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.
Pravin Patel, MD / Andrew Wexler MD / Warren Schubert, MD
Local Host: Victor Lewis, MD

PROGRAM

The Basic Course will be held at the School of Medicine, Northwestern University, Chicago, Illinois. Friday lectures will be held at the Daniel Hale Williams Auditorium, 2nd Floor, 2-320, 240 East Huron. Saturday and Sunday lectures will be held at the Baldwin Auditorium, 1st Floor, Lurie Building at 303 E. Superior Street. Saturday and Sunday labs location will be announced on-site. 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

Victor Cimino, MD, DDS
Loyola University Medical Center

Mimis Cohen, MD
University of Illinois at Chicago

Gaby Doumit, MD
Cleveland Clinic

Arun Gosain, MD
Feinberg School of Medicine

Robert J. Havlik, MD
Indiana University School of Medicine

Tim King, MD, PhD
University of Wisconsin

Victor Lewis, MD
Northwestern University

Alexander Y. Lin, MD
Saint Louis University School of Medicine

McKay McKinnon, MD
University of Chicago

David Morris, MD
University of Illinois at Chicago

Gregory D. Pearson, MD
The Ohio State University

Pravin Patel, MD
University of Illinois & Shriners Hospital

Rainer Schmelzeisen, MD, DDS, PhD
University Clinic Freiburg, Germany

Warren Schubert, MD
University of Minnesota

Peter Tsay, DDS, MS, PhD
Schaumburg, Illinois

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.

FUTURE ASMS COURSES AND PROGRAMS

2012

October 25, 2012
ASMS Pre-Symposium &
ASPS/ASMS Day
New Orleans, Louisiana

2013

January 25-26
ASMS Basic Maxillofacial
Principles and Techniques
Miami, Florida

**For updated ASMS courses
and symposia, please visit the
ASMS Website:
www.maxface.org**

January 27
ASMS Challenges in Cleft Care in
Underdeveloped Countries
Miami, Florida

HOUSING

The Basic Course will be held at the Northwestern University School of Medicine, Chicago, Illinois. ASMS has secured a special group rate at the Omni Hotel (an all suite hotel) of \$289 per night, which includes complimentary WiFi. 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 3, 2012. Omni Hotel, 676 North Michigan Avenue, Chicago / (312) 944-6664


REFUNDS

Cancellations must be in writing to the ASMS/MSF Administrative Office: 500 Cumming Center, Suite 4500, 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.

Attendees may 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, ASPS and ASMS/MSF will make every reasonable effort to accommodate your needs. For any special request, please call the ASMS/MSF Office at 1-978-927-8330 before July 6, 2012.

COURSE SCHEDULE

FRIDAY, AUGUST 3

8:00 am **Registration /Continental Breakfast**
Daniel Hale Williams Auditorium,
240 East Huron, 2nd Fl, Room 2-320

8:30 **Welcome**

- ◆ Introduction to course facility
- ◆ Introduction of course faculty
- ◆ Course Overview
- ◆ Acknowledgment of corporate sponsors

8:40 **Housekeeping Issues**

- ◆ Informal dress
- ◆ Wear name tags at all times
- ◆ Course Evaluation Forms
- ◆ ASMS Application Forms
- ◆ Acknowledgement and thanks to corporate sponsors
- ◆ Reminder of social events

8:45 **Maxillofacial Trauma: Psycho/ Social Aspects**

9:05 **Oral & Dental Anatomy**

- ◆ Teeth and supporting structures (pediatric and adult)
- ◆ Alveolar bone
- ◆ Occlusion terminology and assessment: centric, rest, overjet, overbite, and masticatory positions

9:45 **Use of Dental Splints**

10:00 **Coffee Break**

10:15 **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, parasymphyseal, 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

11:45 **Post Traumatic Facial Restoration: A Philosophy of Care**

12:15-1:15 **Lunch**

1:15 Orthognathic Surgery / Orthodontics / Cephalometrics

Participants will learn the practical aspects of cephalometric analysis and surgical treatment prediction for the following session. Participants will gain an understanding of surgical treatment planning in patient with maxillofacial deformity. The discussion will emphasize the surgical techniques (LeFort I, BSSO, and Genioplasty), the supportive orthodontic management and prosthodontic treatment (osseointegrated implants).

3:00 Coffee Break

3:15 Orthognathic Surgery / Orthodontics/Cephalometrics (cont.)

5:00 Non-Orthognathic Facial Skeletal Contouring

5:30 Friday Program Concludes

SATURDAY, AUGUST 4

7:00 am Continental Breakfast

7:30 am Video for Laboratory Session I

Videos on taking dental impressions, making splints, making a fracture model, construction of a Gunning splint.

9:00 Laboratory Session #1:

All faculty members

The Use of Fracture Models and the taking of Dental Impressions

- ♦ Discussion of alginate, dental stone, plaster, acrylic, wax bite, typodonts, and articulators.

First 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.

Second Exercise:

4. Using your own dental models, make an occlusal splint.
5. Using your own dental models, make a lingual and possible palatal splint, so that you are prepared for your next mandible and palatal fracture.

Third Exercise:

6. A fracture model of a malunion of a mandible and the corresponding maxilla will be provided. Cut the mandible model to replicate the fracture.
7. 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.
8. Once the proper occlusion is established, stabilize the reduction mandible fracture with a glue gun, and then with plaster.
9. 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.
10. Make an acrylic splint.

Fourth Exercise:

11. Construction of an acrylic Gunning splint for a typodont that has mandibular incisors, but is otherwise edentulous.

12:45-1:30 pm Lunch

Baldwin, Auditorium, Lurie Building at 303 E. Superior Street, 1st Floor

Lecture Sessions

1:30 Surgical Approaches to the Midface

1:50 Orbital Fractures and reconstruction (blow-out, blow-in, entrapment) Zygomatic Fractures.

2:30 ASMS Membership & Benefits

- ♦ Introduction to ASMS (History, membership, educational activities)
- ♦ Why join? Membership application.
- ♦ Upcoming courses and meetings.

2:35 Nasal Fractures

- ♦ Naso-Orbital-Ethmoid (N.O.E.)
- ♦ Palatal Fractures

3:00 Maxillary (Le Fort I, II, III) Fractures

- ♦ Frontal sinus Fractures
- ♦ Panfacial Sequencing

3:30 pm Coffee Break

3:45 Discussion of fracture plating and wire exercises

4:00 Laboratory Session #2

All faculty members

Part A: 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

Lab Session #2, Part B:

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)

6:30 Saturday program concludes



SUNDAY, AUGUST 5

7:00 am **Continental Breakfast**

7:30 **Videos for Laboratory Session 3**
Orthognathic videos

8:00 am **Laboratory Session #3**
All faculty members

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 I Osteotomy & plating.

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

Baldwin Auditorium, Lurie Building at 303 E. Superior Street, 1st Floor

9:45 Coffee Break

10:00 **Regional Dental Anesthesia**

- ♦ Maxillary and Mandibular blocks
- ♦ Complications

10:20 **Treatment of Condylar and Subcondylar Mandible Fractures and the use of Endoscopy**

10:40 **Cleft Surgery**

11:00 **Pediatric Craniofacial Surgery**

11:20 **Navigation, Intraoperative Imaging and Preformed Implants**

11:40 **Mandibular Distraction – Surgical Considerations**

12:00 **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

12:20 ASMS Course Adjourns

For updated information on this course and to register online, please visit the ASMS Website: www.maxface.org