

# BASIC MAXILLOFACIAL PRINCIPLES AND TECHNIQUES

February 17-19, 2012  
University of California San Francisco  
San Francisco, CA

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



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Supported by an educational  
grant from KLS-Martin, L.P.

## 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.*

*Jason Pomerantz, MD*

*Pravin Patel, MD*

*Warren Schubert, MD*

*Andrew Wexler MD*

*Local Host: William Hoffman, MD*

## PROGRAM

The Basic Course will be held at the University of California, San Francisco. Lectures will take place at the Health Science West – HSW 300, and Labs will take place at the School of Dentistry – The Dental Center, D-4203, 707 Parnassus Avenue, San Francisco, CA 94143.

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

### **Kevin Bush, MD**

University of British Columbia

### **James Ferraro, MD, DDS**

Former Chairman

### **Sabine Girod, MD, DDS, PhD**

Stanford University Medical Center

### **Robert Havlik, MD**

Indiana University School of Medicine

### **William Hoffman, MD**

University of California, San Francisco

### **Reza Jarrahy, MD**

University of California, Los Angeles

### **Pirko Maguina, MD**

Shriners Hospital for Children

### **Mark Martin, MD, DDS**

Loma Linda University

### **Reid Mueller, MD**

Oregon Health and Science University

### **Pravin Patel, MD**

University of Illinois & Shriners Hospital

### **Jason Pomerantz, MD**

University of California, San Francisco

### **Warren Schubert, MD**

University of Minnesota

### **Bradley Strong, MD**

University of California, Davis

### **Andrew Wexler, MD, MA, FACS**

Southern California Kaiser Permanente

*Faculty subject to change.*

## PROGRAM SPONSORS

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## **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 UCSF in San Francisco, California. ASMS has secured a special group rate at the Intercontinental Mark Hopkins San Francisco of \$195 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 January 26, 2012.

## THE INTERCONTINENTAL MARK HOPKINS SAN FRANCISCO

One Nob Hill, San Francisco, CA 94108 Phone: (415) 392-3434

## 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 by January 20, 2012.

## 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 January 20, 2012.

## FUTURE ASMS COURSES AND PROGRAMS

May 12-13	ASMS Advances in Facial Restoration and Rejuvenation – New Orleans, Louisiana
August 3-5	ASMS Basic Course - Northwestern University, Chicago, Illinois
October 25	ASPS/ASMS Symposium – New Orleans, Louisiana

## FRIDAY, FEBRUARY 17

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### 7:00 am **Registration/Continental Breakfast**

Health Science West – HSW 300

Enter at Medical Science Building, 513 Parnassus Ave

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### 7:30 am **Welcome**

- Introduction to course faculty.
  - Introduction to course faculty.
  - Course overview.
  - Acknowledgment of corporate sponsors.
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### 7:40 am **Housekeeping Issues**

- Informal dress.
  - Wear name tags at all times.
  - Course Evaluation Forms.
  - ASMS Application Forms.
  - Acknowledgment and thanks to corporate supporters.
  - Reminder of social events.
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### 7:45 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.
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### 8:30 am **Use of Dental Splints**

### 8:45 am **Radiological Studies**

- Periapical, occlusal and pantomogram views
  - Facial bones: mandible, maxilla, and TMJ views
  - CAT: Axial, coronal, oblique parasagittal and 3-D reconstruction
  - MRI
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### 9:15 am **Coffee Break**

### 9:30 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-symphyseal, 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
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### 11:00 am **Post Traumatic Facial Restoration: A Philosophy of Care**

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).

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### 11:30 pm – 12:30 pm **Lunch**

### 12:30 pm **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. dental models in the articulator with wax bite

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

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## SATURDAY, FEBRUARY 18

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### 7:00 am **Continental Breakfast**

Health Science West – HSW 300

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

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

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### 9:00 am **Laboratory Session #1:**

#### **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.

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### 12:45 pm – 1:30 pm **Lunch**

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#### **1:30 pm Midface Fractures Part I**

- Surgical approaches
- Orbital Fx's and reconstruction (blow-out, blow-in, entrapment)
- Zygomatic Fx's

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#### **2:30 pm ASMS Membership & Benefits**

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

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#### **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

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#### **3:35 pm Endoscopic Techniques for Orbital Trauma**

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#### **3:50 pm Discussion of fracture plating exercises**

- Discussion of the use of Porous Polyethylene for facial augmentation
- Video of use of wire and MMF procedure

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#### **4:00 pm Coffee Break**

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#### **4:15 pm Laboratory Session#2**

#### **Part 1: 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

#### **Part 2: 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

#### **Part 3: 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)

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### 6:30 p.m. **Saturday program concludes**

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## **SUNDAY, FEBRUARY 19**

Health Science West – HSW 300

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#### **7:00 a.m. Continental Breakfast**

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**7:30 a.m. Videos for Laboratory Session**  
Orthognathic videos of Sabine Girod, MD

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#### **8:00 a.m. 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 1 Osteotomy & plating.

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

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#### **9:45 a.m. Coffee Break**

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#### **10:00 a.m. Regional Dental Anesthesia**

- Maxillary and Mandibular blocks
- Complications

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#### **10:30 a.m. Cleft Surgery**

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#### **11:00 a.m. Pediatric Craniofacial Surgery**

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#### **11:30 a.m. Accelerated Surgical Orthodontics-A Paradigm Shift**

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#### **12:15 p.m. 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

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#### **12:45 p.m. ASMS Course Adjourns**

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# REGISTRATION FORM

Basic Winter Course | February 17–19, 2012

University of California San Francisco | San Francisco, California

*For security reasons, badges will be required for all ASMS events. Pre-registered attendees may pick-up their badges at the ASMS Registration Desk beginning Friday, February 17, 2012.*

Please Print \*Indicates Required Field

Name\*

Institution

Address\*

City\*

State\*

ZIP\*

Country\*

Phone\* (Daytime)

Fax\*

Email\*



Please contact me regarding special needs.

## CANCELATION POLICY:

All requests for cancellations must be received in writing. If a written request of cancellation is received at the Society's Administrative Office prior to January 20, 2012, the registration fee, less a \$50.00 administrative fee, will be refunded after the meeting. Refund requests received after January 20, 2012 will not be honored. Fees cannot be reduced for partial attendance. Please address all written requests to:

Maxillofacial Surgeons Foundation  
Registration Department  
500 Cummings Center, Suite 4550  
Beverly, MA 01915  
PHONE: 978-927-8330  
FAX: 978-524-0461

## REGISTRATION FEES

	Registrant Type	Early Bird Deadline: 1/20/2012	Regular Fee	Total
<input type="checkbox"/>	Medical Student*	\$100	\$150	\$
<input type="checkbox"/>	Plastic Surgery Resident/Fellow*	\$395	\$450	\$
<input type="checkbox"/>	ASMS Member	\$750	\$800	\$
<input type="checkbox"/>	Guest Physician	\$1000	\$1050	\$
<b>TOTAL</b>				\$

\*All medical students and residents/fellows must include a letter of sponsorship from their Program Director or faculty member.

## PAYMENT INFORMATION:

Fees are payable via VISA, MasterCard, American Express, check, or money order. Please indicate your payment method below.



CHECK\* (enclosed)



MONEY ORDER (enclosed)

\* Please make all checks payable to the Maxillofacial Surgeons Foundation

Amount Authorized

Name (as it appears on card)

Credit Card #

Expiration Date

Security Code

Your credit card's security code is a 3- or 4-digit number located on the front or back of your credit card.



Full Billing Address:

Signature:



**American Society of Maxillofacial Surgeons**

500 Cummings Center, Suite 4550

Beverly, MA 01915

[www.maxface.org](http://www.maxface.org)

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