

# Principles of Operative Treatment of Craniomaxillofacial Trauma and Reconstruction

March 24, 2012 - March 25, 2012 Boston, Massachusetts, USA

While a large number of CMF fractures are commonly the result of traumatic injury, many CMF surgeries are performed to address defects or secondary corrections. The diagnosis and treatment of these issues can present difficult challenges requiring multiple approaches. The most common treatment currently available is rigid internal fixation.

The principles courses are designed to equip surgeons with the state-of-the-art skills and techniques for treating and managing CMF fractures from trauma, as well as congenital defects, secondary correction of injuries and aesthetic reconstruction. Highlights of the course will include sessions on anatomy, biomechanics, surgical approaches and principles of internal fixation of the mandible and midface.

Experts in the field of CMF Surgery will compare and contrast current methods and provide indications for the use of these techniques. The program will include didactic sessions, practical exercises and small group discussions (SGD). These SGD compliment both the lectures and the practical exercises by discussing the four AO Principles of Fracture Fixation:

- anatomic Reduction of the fracture fragments, particularly joint fractures;

- stable fixation to ensure proper healing of the fracture allowing surrounding tissue to move and strengthen;

- atraumatic surgical technique to preserve blood supply to the bone fragments and soft tissue; and
- early, pain free mobilization returning the patient to function as soon as possible.

# Event Summary

### Tuition:

Level Name: Participant - Craniomaxillofacial Pricing Tier: Resident Tuition: \$0.00

Level Name: Participant - Craniomaxillofacial Pricing Tier: Attending Tuition: \$0.00

Course Prerequisite(s): No Prerequisites Venue: SEAPORT HOTEL & SEAPORT WORLD TRADE CENTER 1 Seaport Lane Boston, MA, USA Phone Number: 617.385.4216 Language(s): English Directly Provided by:

North America Professional Level Prerequisite(s): No Prerequisites

# CME

### **Continuing Education Credit: 13.00**



AO North America is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

Below Wording CMF Only- Continuing Education Dental Credit Statement..

As an Accreditation Council for Continuing Medical Education (ACCME) accredited provider, AO North America meets the definition of a constituent or component organization of the AMA and thereby meets most state dental board

requirements of an approved sponsor of continuing education. This course is focused on clinical issues in oral-maxillofacial surgery that are relevant to the treatment and care of dental patients. Most states accept AMA constituents as approved sponsors for continuing dental education credit. If you have questions, your state dental board can confirm eligibility of this course.

 Designation Statement - AO North America designates this live educational activity for a maximum of 13.00 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

The Continuing Medical Education (CME) mission of AO North America (AONA®) is to provide comprehensive multidisciplinary needs based education to surgeons, fellows, and residents in the specialties of orthopedic, hand, craniomaxillofacial, spine, neurosurgery, and veterinary surgery in the areas of trauma (i.e.), operative reduction and fixation), degenerative disorders, deformities, tumors, and reconstruction.

Expected results of AONA's CME activities for surgeons, fellows, and residents are to:

• Increase their knowledge base and surgical skill level

• Improve competence by applying advances of knowledge in patient care in the areas of trauma, degenerative

disorders, deformities, tumors, and reconstructive surgical techniques

 Address practice performance gaps by improving management of aspects of traumatic injuries and musculoskeletal disorders (i.e., preoperative planning to post-operative care)

# Learning Objectives

### Upon completion, participants should be able to:

- describe the principles of stable internal fixation as outlined by the AO
- define the biological and mechanical aspects of fracture healing
- discuss the problems, complications and intraoperative difficulties that can result from internal fixation
- explain preoperative planning methods and outcome analysis
- · apply the psychomotor skills developed in the practical exercises into surgical practice

# Faculty



# Padwa, Bonnie - Chairperson

DMD, MD, FACS Associate Professor Harvard Medical School & Harvard School of Dental Medicine Oral Surgeon-in-Chief Department of Plastic & Oral Surgery Boston Children's Hospital Boston, Massachusetts

Der Sarkissian, Raffi - Co-Chairperson MD, FACS Assistant Clinical Professor of Otolaryngology -Head and Neck Surgery Boston University School of Medicine Staff Surgeon Massachusetts Eye & Ear Infirmary



# Girotto, John - Co-Chairperson

MD, MBA, FAAP, FACS Associate Professor, Michigan State College of Human Medicine Pediatrics & Plastic Surgery Helen DeVos Children's Hospital Chief, Craniofacial Surgery Medical Director of Operations, HDVCH Operating Rooms Grand Rapids, Michigan



# Matic, Damir - Director

Boston, Massachusetts

MD, MSc, FRCSC Plastic and Reconstructive Surgery Professor Emeritus Western University London, Ontario

Dr. Matic finished both his medical school and residency training in Plastic Surgery at the University of Toronto. He completed a fellowship in Craniofacial surgery at Johns Hopkins Hospital and at the University of Maryland. After working at St. Michael's Hospital in Toronto for a year he moved to London, Ontario in 2002. He is currently a Professor Emeritus at Western University, working in private practice. His primary clinical interests include cleft lip and palate, secondary facial trauma reconstruction, facial nerve re-animation and esthetic surgery. He completed a Master's of Science degree in London at Western University in the Department of Medical Biophysics. His current research interests include facial growth, the effects of botulinum toxin on nerve regeneration, and long term analysis of cleft lip repair and orbicularis oris muscle motion.



# Aziz, Shahid - Lecturer

DMD, MD, FACS, FRCS(Ed), FICD Professor of Otolaryngology, Hackensack Meridian School of Medicine Division Director, Oral & Maxillofacial Surgery, Hackensack Meridian Health Clinical Professor, Oral & Maxillofacial Surgery Rutgers School of Dental Medicine Visiting Professor Update Dental College Dhaka BD

Hackensack, New Jersey

Shahid Aziz is the co-founder and President of Smile Bangladesh. A 1st generation Bengali-American, Shahid has been leading a small team of surgeons, anesthesiologists, and nurses to Bangladesh since 2006. To date, his teams have treated about 2000 children and adults with cleft lip and palate deformities. Shahid is a Professor of Otolaryngology, Hackensack Meridian School of Medicine, Clinical Professor of Oral and Maxillofacial Surgery, is a Diplomat of the American Board of Oral and Maxillofacial Surgery, a Fellow of the American College of Surgeons, a Fellow of the International College of Dentists, and Fellow of the Royal College of Surgeons, Edinburgh. Shahid is also Division Director of OMFS at Hackensack University Medical Center. He is a graduate of the Lawrenceville School and Rutgers College. Shahid received his dental degree from Harvard University School of Dental Medicine and his medical degree from Columbia University College of Physicians and Surgeons. He completed his general surgery and oral/maxillofacial surgery training at New York-Presbyterian Hospital-Columbia University Medical Center. He has authored or co-authored over 50 peer reviewed journal articles and 20 book chapters. Shahid's clinical area of expertise includes facial trauma, reconstruction, and orthognathic surgery. He currently serves as past President of the New Jersey Society of Oral and Maxillofacial Surgeons, Chairman of the Section of Dentistry and Oral Health of the New York Academy of Medicine, and President of Smile Bangladesh.



# Bonawitz, Steven - Lecturer

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Elahi, Mohammed - Lecturer MD, FRCSC, MSc Clinical Adjunct Faculty The Scarborough General Hospital St Michael's Hospital Toronto, Ontario



### Fedok, Fred - Lecturer MD. FACS

Adjunct Professor Facial Plastic and Reconstructive Surgery Department of Surgery University of South Alabama Mobile, Alabama

Dr. Fred G. Fedok is the Immediate Past President of the American Academy of Facial Plastic and Reconstructive Surgery (AAFPRS). Dr. Fedok is widely published and lectures extensively nationally and internationally. He is in private practice on the Gulf Coast in Foley, Alabama and is Adjunct Professor of Surgery at the University of South Alabama. His innovative and successful practice focuses on the individual needs of each patient in facial cosmetic and reconstructive situations. Dr. Fedok is continuously seeking the most advanced forms of treatment, correction and rejuvenation techniques to ensure patients receive top-quality care and outcomes. In addition, Dr. Fedok is: • Fellow and Member American Academy of Facial Plastic and Reconstructive Surgery, American Academy of Otolaryngology - Head and Neck Surgery and the American College of Surgeons • Member of the AMA • Diplomat of the National Board of Medical Examiners • Board of Directors of the American Board of Facial Plastic and Reconstructive Education Committee of the AAO-HNS (2006-2013) • Faculty of AO CMF • Board certified by the American Board of Facial Plastic and Reconstructive Surgery, the American Board of Otolaryngology and the American Board of emergency Medicine • Former Professor and Chief of Otolaryngology – Head and Neck Surgery and Director of the Section of Facial Plastic and Reconstructive Surgery at the Hershey Medical Center of the Pennsylvania State University (1995-2013)



# Grant, Michael - Lecturer

MD, PhD, FACS Milton T. Edgerton Endowed Professor in Plastic Surgery Director of Craniofacial Surgery Professor of Plastic Surgery and Ophthalmology University of Virginia School of Medicine Charlottsville, Virginia

Michael P. Grant, MD, PhD, FACS Michael P. Grant, MD, PhD, FACS is the Paul N. Manson Distinguished Professor, and Chief of Plastic, Reconstructive and Maxillofacial Surgery at the R Adams Cowley Shock Trauma Center, University of Maryland Medical Center, and Professor of Surgery and Ophthalmology, University of Maryland School of Medicine in Baltimore Maryland. Previously, he served as Director of Oculoplastic Surgery, Wilmer Eye Institute, Johns Hopkins University School of Medicine as well as the chief of the Eye and Orbital Trauma Center at the Johns Hopkins Hospital. As one of the few dual-trained plastic surgeons and ophthalmologists, Dr Grant's specializes in complex craniomaxillofacial reconstruction the facial skeleton, and soft tissue of the periorbital region. This includes eyelid reconstruction, reconstruction of the internal orbit, and lacrimal system following trauma, removal of tumors, and congenital malformations. Working closely with industry partners Dr. Grant is developing and optimizing the application of computer assisted design of patient specific (custom) implants. Dr. Grant is an internationally recognized expert in the fields of primary and secondary orbital reconstruction, computer assisted surgery, and facial aesthetic surgery. Dr Grant's research interests include applying innovative solutions to difficult clinical problems. He is actively engaged in the development of biomaterials for conjunctival reconstruction, to provide lining for the orbit and maintenance of the heath of the ocular surface. This approach may prove useful in correction of all types of lining deficits craniofacial reconstruction. Using the "organ on a chip" approach, these studies have been extended by developing an "eye on a chip" 3D co-culture system to investigate the dynamics of the ocular surface and investigate novel therapies for dry eye treatment. In parallel, he is investigating mechanisms of immunomodulation in corneal injury and wound healing. A separate line of investigation involves utilizing progenitor cells for regeneration of bone in the craniofacial skeleton. Finally, Dr. Grant is involved application of computer assisted, and image guided surgical techniques to make orbital reconstruction safer and more predictable for patients. Dr Grant was selected as a trainee in the Medical Scientist Training Program at Case Western Reserve University, receiving a M.D., and Ph.D. in neurosciences. He completed the Ophthalmology residency at the Wilmer Eye Institute, Johns Hopkins Hospital, followed by a General Plastic Surgery residency in the Johns Hopkins/University of Maryland Training Program. Dr. Grant is one of only a few surgeons in the country that is board certified in both disciplines. He is a member of the American Society of Plastic Surgery, American Society of Maxillofacial Surgeons, American Society of Oculoplastic and Reconstructive Surgery, American Academy of Ophthalmology, and a fellow of the American College of Surgeons.



# Greenberg, Alex - Lecturer

DDS Assistant Clinical Professor Oral and Maxillofacial Surgery College of Dental Medicine Columbia University New York, New York



Kelly, John - Lecturer DMD, MD, FACS Chief, Section of Oral & Maxillofacial Surg. Hospital of St Raphael Clinical Associate Professor Yale Medical School New Haven, Connecticut 4

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# University of Massachusetts Worcester, Massachusetts

Department of Surgery

Professor of Surgery and Pediatarics Division of Plastic Surgery

Lalikos, Janice - Lecturer MA, MD, FACS



# Steinbacher, Derek - Lecturer

MD, DMD, FACS Director Craniofacial Program Associate Professor Yale University School of Medicine Yale Plastic and Craniomaxillofacial Surgery Yale Oral and Maxillofacial Surgery New Haven, Connecticut



Topham, Neal - Lecturer MD, FACS Dr Fox Chase Cancer Center Philadelphia, Pennsylvania

## AO NA Disclaimer Information

### Faculty Disclosure:

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Some medical devices used for teaching purposes and/or discussed in AO North America's educational activities may have been cleared by the FDA for specific uses only or may not yet be approved for any purpose. Faculty may discuss off-label, investigational, or experimental uses of products/devices in CME certified educational activities. Faculty have been advised that all recommendations involving clinical medicine in this CME activity are based on evidence that is accepted within the profession of medicine as adequate justification for their indications and contraindications in the care of patients.

All scientific research referred to, reported or used in this CME activity in support or justification of a patient care recommendation conforms to the generally accepted standards of experimental design, data collection and analysis.

### Disclaimer:

AONA does not endorse nor promote the use of any product/device of commercial entities. Equipment used in this course is for teaching purposes only with the intent to enhance the learning experience.

### USE THE BELOW TEXT FOR DIDACTIC COURSES ONLY!

The opinions or views expressed in this live continuing medical education activity are those of the faculty and do not necessarily reflect the opinions or recommendations of

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# Laboratory Waiver:

To participate in this surgical skills course, you will be required to sign a waiver of liability prior to the course. In order to participate, AONA's policy mandates that every individual must wear appropriate protective garments provided by AO NA during the lab sessions. Participants who do not sign the waiver and wear protective garments will not be allowed to participate in the laboratory sessions.

### Human Anatomic Specimens:

This course will involve exposure to and contact with human anatomic specimens. These specimens are being utilized for purposes of teaching and learning and are to be treated with the utmost respect. Participants should be familiar with and understand the potential risks involved and will be required to observe all customary safety procedures.

### Animal Anatomic Specimens:

This course will involve exposure to and contact with animal anatomic specimens. These specimens are being utilized for purposes of teaching and learning and are to be treated with the utmost respect. Participants should be familiar with and understand the potential risks involved and will be required to observe all customary safety procedures.

### Acknowledgment

### In-Kind Support

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### **Educational Grant**

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