

# EXTREMITY WAR INJURIES: STATE OF THE ART AND FUTURE DIRECTIONS

MANDARIN ORIENTAL WASHINGTON, DC  
1330 MARYLAND AVENUE, S.W.  
WASHINGTON, D.C. 20024, U.S.A.

## SYMPOSIUM AGENDA

TUESDAY, JANUARY 24, 2006		
<b>Late afternoon</b>	<b>Arrivals</b>	Mandarin Oriental
<b>3:00-6:00pm</b>	<b>Check-In and Open Registration</b> <i>Please check in to receive your agenda book. Faculty should bring their PowerPoint presentations (if applicable) and manuscripts. The AAOS Staff will collect your manuscripts and save your PowerPoint presentations to the main computer at this point.</i>	Mandarin Oriental Freer Room (AAOS Office*)
<b>5:00pm</b>	<b>Preparatory Moderator Meeting</b> <i>Mandatory for all Session and Recap/Prioritization Moderators</i>	Mandarin Oriental Portrait Room
<b>6:00-8:00pm</b>	<b>Welcome Dinner Reception</b> <b>Opening Comments:</b> <i>Andrew Pollak, MD, and Jason Calhoun, MD</i>	Mandarin Oriental Gallery
WEDNESDAY, JANUARY 25, 2006		
	<b>AAOS Office Hours* 6:30am-4:00pm</b>	Mandarin Oriental Freer Room
<b>6:30am</b>	<b>Continental Breakfast</b> <i>An informal continental breakfast will be served in the general session room (Ballroom B and C).</i>	Mandarin Oriental Ballroom B and C
<b>7:20am</b>	<b>Call to Order:</b> <i>Andrew Pollak, MD</i> <b>Symposium Welcome:</b> <i>Stuart Weinstein, MD</i>	Mandarin Oriental Ballroom B and C
<b>7:30-9:30am</b>	<b>Session I – Wound Management A</b>  <b>Moderators:</b> Andrew Pollak, MD, and Romney C. Andersen, MD  <b>7:30-7:45am Panel Introductions/ Scope of Wounds</b> <i>Daniel Hebert, MD, CDR, MC, USN</i> <b>7:45-8:00am From the Battlefields to the States: The Road to Recovery</b> <i>Joachim Tenuta, MD, COL, MC</i> <b>8:00-8:15am Debridement Techniques</b> <i>Gavin Bowyer, MD</i> <b>8:15-8:30am Timing of Debridement</b> <i>Andrew Pollak, MD</i> <b>8:30-8:45am Coverage Techniques</b> <i>Anand Kumar, LCDR, MC, USNR</i> <b>8:45-9:00am Timing of Coverage</b> <i>Randy Sherman, MD</i> <b>9:00-9:15am Removal of Retained Shrapnel: When and Why?</b> <i>Meir Liebergall, MD</i> <b>9:15-9:30am Questions/Comments</b>	Mandarin Oriental Ballroom B and C
<b>9:30-9:45am</b>	<b>Break</b>	Mandarin Oriental Ballroom Foyer

\* AAOS Staff will maintain an office in the Freer Room, which is in close proximity to the Ballroom. During these hours there will be computer and internet access, phone, and fax available for your use.

<p><b>9:45-11:15am</b></p> <p><b>9:45-10:00am</b></p> <p><b>10:00-10:15am</b></p> <p><b>10:15-10:30am</b></p> <p><b>10:30-10:45am</b></p> <p><b>10:45-11:00am</b></p> <p><b>11:00-11:15am</b></p>	<p><b>Session II – Wound Management B</b></p> <p><b>Moderators:</b> COL Mark Bagg, MD and Scott Levin, MD</p> <p><b>Panel Introductions/Scope of Wounds</b> <i>Thomas Crabtree, LTC, MD</i></p> <p><b>WoundVAC® and Topical Negative Pressure Devices</b> <i>Lawrence X. Webb, MD</i></p> <p><b>Flap Techniques – New Developments and Horizons</b> <i>L. Scott Levin, MD</i></p> <p><b>Complications of Blast Injuries: Extensive Edema</b> <i>Marko Bumbaširević, MD</i></p> <p><b>New Developments in Wound Management (Biobrane®)</b> <i>CDR Francis X. McGuigan MC, USN, MD</i></p> <p><b>Questions/Comments</b></p>	<p>Mandarin Oriental Ballroom B and C</p>
<p><b>11:15am-12:00pm</b></p>	<p><b>Breakout Groups: Session 1</b></p> <p><b>Group 1-A – Timing and Technique of Debridement</b> <b>Moderator:</b> <i>Andrew Pollak, MD</i> <b>Scribe:</b> <i>Gavin Bowyer, MD</i></p> <p><b>Group 1-B – Timing and Techniques of Coverage</b> <b>Moderator:</b> <i>Randy Sherman, MD</i> <b>Scribe:</b> <i>Mark Bagg, MD, COL</i></p> <p><b>Group 1-C – Blast Complications and Emerging Technologies</b> <b>Moderator:</b> <i>L. Scott Levin, MD</i> <b>Scribe:</b> <i>Romney C. Andersen, MD</i></p>	<p>Mandarin Oriental: Garden Room I</p> <p>Garden Room II</p> <p>Oriental Ballroom B and C</p>
<p><b>12:00-12:30pm</b></p>	<p><b>Recap and Prioritization – Presentations of Breakout Groups</b> <b>Moderator:</b> Joshua J. Jacobs, MD <b>Facilitator:</b> Gunnar B.J. Andersson, MD, PhD</p>	<p>Mandarin Oriental Ballroom B and C</p>
<p><b>12:30-1:15pm</b></p>	<p><b>Luncheon Buffet</b> <b>Introduction:</b> <i>Joshua J. Jacobs, MD</i> <b>Keynote Speaker:</b> <i>Thamer A. Hamdan, FRCS</i></p>	<p>Mandarin Oriental Ballroom A</p>
<p><b>1:15-2:45pm</b></p> <p><b>1:15-1:30pm</b></p> <p><b>1:30-1:45pm</b></p> <p><b>1:45-2:00pm</b></p> <p><b>2:00-2:15pm</b></p> <p><b>2:15-2:30pm</b></p> <p><b>2:30-2:45pm</b></p>	<p><b>Session III – Antibiotics and Infection</b></p> <p><b>Moderators:</b> Jason Calhoun, MD and Timothy Kuklo, MD, JD, COL</p> <p><b>Panel Introductions/Scope of Wounds</b> <i>Timothy Kuklo, MD, JD, COL</i></p> <p><b>Prevalence of Antibiotic Resistant Organisms</b> <i>Joel T. Fishbain, MD, COL</i></p> <p><b>Current Recommendations Regarding Antibiotic Prophylaxis</b> <i>Paul Holtom, MD</i></p> <p><b>Treatment of Acute Infection</b> <i>Laura Prokuski, MD</i></p> <p><b>Treatment of Chronic Infection</b> <i>George Cierny III, MD</i></p> <p><b>Questions/Comments</b></p>	<p>Mandarin Oriental Ballroom B and C</p>
<p><b>2:45-3:15pm</b></p>	<p><b>Breakout Groups: Session 2</b></p> <p><b>Group 2-A – Resistant Organisms and Infections</b> <b>Moderator:</b> <i>Paul Holtom, MD</i> <b>Scribe:</b> <i>Timothy Kuklo, MD, JD, COL</i></p> <p><b>Group 2-B – Ideal Prophylaxis Regimens</b> <b>Moderator:</b> <i>Joel T. Fishbain, MD, COL</i> <b>Scribe:</b> <i>Jason Calhoun, MD</i></p>	<p><u>Mandarin Oriental</u></p> <p>Garden Room I</p> <p>Garden Room II</p>

	<b>Group 2-C – Treatment of Infection</b> <b>Moderator:</b> <i>Laura Prokuski, MD</i> <b>Scribe:</b> <i>George Cierny III, MD</i>	Oriental Ballroom
<b>3:15-3:45pm</b>	<b>Recap and Prioritization – Presentations of Breakout Groups</b> <b>Moderator:</b> Gunnar B.J. Andersson, MD, PhD <b>Facilitator:</b> Michael Bosse, MD	Mandarin Oriental Ballroom B and C
<b>4:10-4:50pm</b>	<b><u>Tour of Walter Reed Army Medical Center (WRAMC)</u></b> <i>Travel time to WRAMC. Two buses will meet in the lower level horseshoe driveway of the Mandarin Oriental Hotel for departure at 4:10pm.</i> <b>NOTE: Government issued identification (driver's license or passport) is required from ALL ATTENDEES to enter the base. Local attendees driving their own vehicles: Parking will be available.</b>	Campus of Walter Reed Army Medical Center 6900 Georgia Avenue, N.W. Washington, D.C. 20306
<b>4:50pm</b>	Arrive: Parking Circle, Building 2, WRAMC	
<b>4:55pm</b>	Assemble: Joel Auditorium, Second Floor, Building 2	
<b>5:00-5:05pm</b>	Welcome: <i>MG Kenneth L. Farmer, Jr., Medical Corps, US Army, Commanding General, WRAMC</i>	
<b>5:05-5:15pm</b>	Overview of WRAMC Amputee Patient Care Program: <i>COL William C. Doukas, MC, USA, Chief, Department of Orthopaedics and Rehabilitation</i>	
<b>5:20-6:05pm</b>	Breakout into three groups for Tours: A) Brace and Limb Shop/Gait Lab B) Occupational Therapy/Fort Independence C) Physical Therapy (15 minutes each)	
<b>6:10-6:20pm</b>	Question and Answer Session and Video Presentation – Joel Auditorium	
<b>6:25pm</b>	Board busses for transportation to the National Museum of Health and Medicine of the Armed Forces Institute of Pathology (AFIP) on second floor parking circle, Building 2	
<b>6:30pm</b>	Reception at AFIP	
<b>7:15pm</b>	Seated Dinner at AFIP	
<b>8:30pm</b>	<b>Depart for Hotel</b>	
<b>THURSDAY, JANUARY 26, 2006</b>		
	<b>AAOS Office Hours* 7:00am-5:00pm</b>	Mandarin Oriental Freer Room
<b>7:00am</b>	<b>Continental Breakfast</b> <i>An informal continental breakfast will be served in the general session room (Ballroom B and C).</i>	Mandarin Oriental Ballroom B and C
<b>7:25am</b>	<b>Call to Order / Introduction of Morning Address:</b> <i>Jason Calhoun, MD</i>	Mandarin Oriental Ballroom B and C
<b>7:30am</b>	<b>Morning Address:</b> <i>Donald C. Arthur, VADM (SG) BUMED Surgeon General of the Navy and Chief, Bureau of Medicine and Surgery</i>	Mandarin Oriental Ballroom B and C
<b>8:00-10:00am</b>	<b>Session IV – Stabilization of Long Bones</b> <b>Moderators:</b> Andrew Burgess, MD; Michael Mazurek, MD, CDR(s) MC USN	Mandarin Oriental Ballroom B and C

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<b>8:00-8:15am</b>	<b>Panel Introductions/Scope of Wounds</b> <i>Michael Mazurek, MD, CDR(s) MC USN</i>	
<b>8:15-8:30am</b>	<b>Far-Forward Stabilization Options: Splints vs. Ex-Fix</b> <i>Matthew Camuso, MD, LCDR MC USNR</i>	
<b>8:30-8:45am</b>	<b>Conversion of Ex-Fix to Definitive Fixation: Shaft Fractures</b> <i>Paul Dougherty, MD</i>	
<b>8:45-9:00am</b>	<b>Conversion of Ex-Fix to Definitive Fixation: Peri-Articular Injuries</b> <i>David B. Carmack, MD</i>	
<b>9:00-9:15am</b>	<b>Indications for Definitive Treatment in Ex-Fix/Nailing of Closed Tibial and Femoral Shaft Fractures</b> <i>Greg Della Rocca, MD</i>	
<b>9:15-9:30am</b>	<b>Difference Between Fractures from Gun and Blast Injuries</b> <i>Meir Liebergall, MD</i>	
<b>9:30-9:55am</b>	<b>Questions/Comments</b>	
<b>9:55-10:10am</b>	<b>Break</b>	
<b>10:10am-12:40pm</b>	<b>Session V – Management of Segmental Bone Defects</b>  <b>Moderators:</b> Michael Bosse, MD and Roman Hayda, MD	Mandarin Oriental Ballroom B and C
<b>10:10-10:25am</b>	<b>Panel Introductions/Scope of Wounds</b> <i>Roman Hayda, MD</i>	
<b>10:25-10:40am</b>	<b>Advances in Acceleration of Fracture Healing</b> <i>Edward Puzas, PhD</i>	
<b>10:40-10:55am</b>	<b>Tissue Engineering Solutions for Traumatic Tissue Loss</b> <i>Steven Goldstein, PhD</i>	
<b>10:55-11:10am</b>	<b>Autograft</b> <i>James Kellam, MD</i>	
<b>11:10-11:25am</b>	<b>Distraction Osteogenesis</b> <i>Tracy Watson, MD</i>	
<b>11:25-11:40am</b>	<b>Orthobiologics (excluding recombinant proteins)</b> <i>Michael McKee, MD, FRCSC</i>	
<b>11:40-11:55am</b>	<b>Recombinant Proteins</b> <i>Alan L. Jones, MD</i>	
<b>11:55am-12:10pm</b>	<b>Microvascular Reconstruction as it Relates to Bone</b> <i>L. Scott Levin, MD</i>	
<b>12:10-12:25pm</b>	<b>Response of Bone and Cartilage Cells to Biomaterials</b> <i>Barbara Boyan, PhD</i>	
<b>12:25-12:40pm</b>	<b>Questions/Comments</b>	
<b>12:40-1:50pm</b>	<b>Luncheon</b>  <b>Keynote Speaker:</b> James Panagis, MD, MPH <i>Director, Orthopaedics, National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS)</i>	Mandarin Oriental Ballroom A
<b>1:50-2:40pm</b>	<b>Breakout Groups: Session 3</b>  <b>Group 3-A – Fixation Issues – Timing and Techniques</b> <b>Moderator:</b> James Kellam, MD <b>Scribe:</b> Andrew Burgess, MD  <b>Group 3-B – Distraction Osteogenesis vs. Traditional Grafting Techniques</b> <b>Moderator:</b> Tracy Watson, MD <b>Scribe:</b> Greg Osgood, MD  <b>Group 3-C – Evaluation of New Technologies</b> <b>Moderator:</b> Alan L. Jones, MD <b>Scribe:</b> Roman Hayda, MD	Mandarin Oriental  Hirshhorn  Sackler  Oriental Ballroom B and C
<b>2:40-3:25pm</b>	<b>Recap and Prioritization – Presentations of Breakout Groups</b> <b>Moderator:</b> Michael Bosse, MD <b>Facilitator:</b> Gunnar B.J. Andersson, MD, PhD	Mandarin Oriental Ballroom B and C

<b>3:25pm-5:30pm</b>	<b>Work Time (Manuscript revisions, Breakout group follow-up, etc).</b> *or* <b>Optional V.I.P. Tour of Holocaust Museum:</b> <i>This is an “on your own” optional activity. VIP tickets are available at symposium check in, and will allow you to bypass the line at the museum. The museum closes at 5:30pm and is located 2 miles from the hotel. Taxicab fares are reimbursable.</i>	Mandarin Oriental  Holocaust Museum 100 Raoul Wallenberg Place, S.W. Washington, D.C. 20024-2126
<b>6:30pm</b>	<b>Moderator/Faculty Only Dinner</b> <i>The Old Ebbitt Grille is located less than 3 miles from the hotel. Taxi fares are reimbursable.</i> <b>Dinner “On Your Own”</b> <i>Out of town non-moderator/non-faculty symposium participants. Please refer to AAOS Travel Policy for reimbursement details.</i>	Old Ebbitt Grille Cabinet Room 675 15th St N.W., Washington, D.C. 20005
<b>Evening</b>	<b>Free time</b>	
<b>FRIDAY, JANUARY 27, 2006</b>		
	<b>AAOS Office Hours* 6:30am-1:00pm</b>	Mandarin Oriental Freer Room
<b>6:45am</b>	<b>Continental Breakfast</b> <i>An informal continental breakfast will be served in the general session room (Ballroom B and C).</i>	Mandarin Oriental Ballroom B and C
<b>7:10am</b>	<b>Call to Order:</b> <i>Andrew Pollak, MD</i>	Mandarin Oriental Ballroom B and C
<b>7:12-10:45am</b>	<b>Session VI: Amputee Care</b>  <b>Moderators:</b> Douglas Smith, MD, Donald Gajewski, MD, and Robert Granville, MD, FAAOS, FACS, COL MC USA  <b>7:12-7:15am Panel Introductions</b> <i>Session Moderators</i> <b>7:15-7:30am Battlefield Care</b> <i>Robert Granville, MD, FAAOS, FACS, COL MC USA</i> <b>7:30-7:45am Open Amputation to Final Closure</b> <i>Donald Gajewski, MD</i> <b>7:45-8:00am Amputation is Not Isolated</b> <i>Charles Scoville, COL (Ret), USA, M.Ed., MPT</i> <b>8:00-8:15am Heterotopic Bone</b> <i>Benjamin Kyle Potter, MD, CAPT MC</i> <b>8:15-8:30am Horizons in Prosthetic Development for Restoration of Limb Function</b> <i>Roy K. Aaron, MD</i> <b>8:30-9:00am Military LEAP (Lower Extremity Amputation Prevention Program)</b> <i>Ellen MacKenzie, MSc, PhD</i>	Mandarin Oriental Ballroom B and C
<b>9:00-9:15am</b>	<b>Break</b>	Mandarin Oriental Ballroom Foyer
<b>9:15-10:30am</b>	<b>Scope of Wounds/Unique Cases</b> <i>Douglas Smith, MD and John Ferguson, CPO</i>	Mandarin Oriental Ballroom B and C
<b>10:30-10:40am</b>	<b>NCMRR: Future Research Directions for Extremity Injuries</b> <i>Michael Weinrich, MD</i>	
<b>10:40-11:00</b>	<b>Questions/Comments</b>	
<b>11:00am-11:50am</b>	<b>Breakout Groups: Session 4</b>  <b>Group 4-A – Outcomes Based Analysis</b> <b>Moderator:</b> <i>Ellen MacKenzie, MSc, PhD</i> <b>Scribe:</b> <i>Robert Granville, MD</i>	<u>Mandarin Oriental</u>  Gallery

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	<p><b>Group 4-B</b> – Prosthetic Development  <b>Moderator:</b> Roy K. Aaron, MD  <b>Scribe:</b> Benjamin Kyle Potter, MD</p> <p><b>Group4-C</b> – Wound Complications  <b>Moderator:</b> Douglas Smith, MD  <b>Scribe:</b> Donald Gajewski, MD</p>	<p>Oriental Ballroom B and C</p> <p>Oriental Ballroom A</p>
<b>11:50-12:20pm</b>	<p><b>Recap and Prioritization – Presentations of Breakout Groups</b>  <b>Moderator:</b> Gunnar B.J. Andersson, MD, PhD  <b>Facilitator:</b> Rick Bonnacarrere, MD</p>	Mandarin Oriental Ballroom B and C
<b>12:20pm</b>	<p><b>Concluding/Wrap Up Remarks:</b>  Jason Calhoun, MD, and Andrew Pollak, MD</p> <p><b>** Conference Concludes for Faculty and Participants**</b></p>	Mandarin Oriental Ballroom B and C
<b>12:30-1:30pm</b>	<p><b>Working Lunch: Moderator/Chair Report Session</b>  <i>Symposium Chairs, Moderators, and Session Recap Leaders Only. Group will finalize the list of priorities and ensure all manuscripts have been submitted and edited.</i></p>	Mandarin Oriental Gallery