

Friday, June 10, 2022

7:15 AM Continental Breakfast

7:45 AM Opening Remarks

J. Lawrence Marsh, MD

SESSION #1	Moderator: Catherine Olinger, MD	
8:00 AM	<i>Senior Resident Presentation - Comparison of Direct Surgical Cost and Outcomes for Unstable Elbow Injuries: Internal Joint Stabilizer Versus External Fixation</i>	Malynda Wynn, MD • Douglas Dennis, MD • Chris Cychosz, MD
8:50 AM	<i>Timing of Orthopaedic Surgery in Multiple Trauma Patients: Development of a Protocol for Early Appropriate Care</i>	Heather A. Vallier, MD
9:30 AM	<b>Faculty Spotlight:</b> <i>Identifying Contributors to and Interventions for PTOA in a Minipig Model of Intra-articular Fracture</i>	Jessica E. Goetz, PhD
10:10 AM	<b>Refreshment Break</b>	
10:30 AM	<i>Senior Resident Presentation - Long Term Outcomes Following Tibial Plafond Fractures</i>	Joshua Eisenberg, MD • Heather A. Vallier, MD • David E. DeMik, MD, PharmD
11:20 AM	<i>Rate of Incidental Findings on Routine Preoperative Computed Tomography for Shoulder Arthroplasty</i>	Daniel G. Meeker, MD, PhD
11:35 AM	<i>Trends in the Treatment of Proximal Humerus Fractures in the United States Medicare Population</i>	Garrett V. Christensen, MD
11:50 AM	Lunch in the MERF Atrium & Larson Conference Room	

SESSION #2	Moderator: Lindsey Caldwell, MD, FAOS	
1:00 PM	<i>Senior Resident Presentation - Impact of Nutritional Supplementation on Wound Healing in the Soft Tissue Sarcoma Population</i>	Michael Russell, MD • Heather A. Vallier, MD • Kyle Kesler, MD
1:50 PM	<i>Career Trips: 20 Pearls I've Learned from 35 years as a Total Joint Surgeon</i>	Douglas Dennis, MD
2:10 PM	<i>Significant Loss of Skeletal Muscle Mass Occurs After Musculoskeletal Trauma</i>	Aspen Miller, BS
2:25 PM	<i>Utility of PACU Versus Post-Operative Day 1 Radiographs Following Shoulder Arthroplasty</i>	Taylor Den Hartog, MD
2:40 PM	<i>Syndesmosis Malposition and Loss of Joint Space on Weight Bearing CT is Associated with Inferior Patient Reported Outcomes after Tibia Plafond Fracture</i>	John Davison, MPH
2:55 PM	<b>Refreshment Break</b>	
3:10 PM	<i>Senior Resident Presentation - A Prospective Investigation of Primary Total Knee Arthroplasty Rehabilitation Using a Smart Orthotic Versus Outpatient Physical Therapy</i>	Scott Muffly, MD • Douglas Dennis, MD • Christopher N. Carender, MD
4:00 PM	<i>Principles of Revision Total Knee Arthroplasty</i>	Douglas Dennis, MD
4:40 PM	<b>Adjourn</b>	
6:00 PM	<b>Reception and Dinner at The Heights Rooftop Ballroom, Courtyard by Marriott, University Heights, Iowa City</b>	

**Content:** Determination of educational content for this educational activity and the selection of speakers/facilitators are responsibilities of the activity director. Any commercial firms providing financial support did not have input in these areas.

**Target Audience:** Faculty, residents, fellows, medical students and community physicians.

**Educational Objectives:** Upon participating in this educational program, the participant should be able to:

- Describe common and complex musculoskeletal problems and their treatment options and scientific basis.
- Assess effectiveness of screening programs, cost effectiveness of and difference between treatment options to integrate research with clinical expertise for optimal patient care.
- Discuss effective outcome and research principles to change processes and system care.

Saturday, June 11, 2022

7:30 AM Continental Breakfast

7:45 AM Opening Remarks

Joseph Buckwalter V, MD, PhD

SESSION #3	Moderator: Heather R. Kowalski, MD	
8:00 AM	<i>Senior Resident Presentation - Is the Central Peg Necessary? Clinical Outcomes of the Modified Polyethylene Vault Preserving Glenoid Component in Total Shoulder Arthroplasty</i>	Trevor Gulbrandsen, MD • Douglas Dennis, MD • Christopher P. Lindsey, MD
8:50 AM	<i>Understanding The Hip-Spine Relationship in Total Hip Arthroplasty</i>	Douglas Dennis, MD
9:30 AM	<i>Using Custom Dynamic Orthoses to Prevent Post-Traumatic Ankle Osteoarthritis</i>	Lucinda Williamson, BS
9:45 AM	<b>Refreshment Break</b>	
10:00 AM	<i>Senior Resident Presentation - Identifying Total Joint Arthroplasty Patients at Risk of Active Dental Infection and Development of a Novel Screening Tool</i>	James Kohler, MD • Heather A. Vallier, MD • Alan G. Shamrock, MD
10:50 AM	<i>Optimizing Recovery After Trauma</i>	Heather A. Vallier, MD
11:30 AM	<i>Prevalence and Pattern of Lateral Impingements in the Progressive Collapsing Foot Deformity</i>	Samuel J. Ahrenholz, MS
11:45 AM	<i>Quantifying Ankle Arthritis Using a 3D Hounsfield Unit Weight-Bearing Computed Tomography Algorithm</i>	Tutku Tazegul, BBME
12:00 PM	<i>Semiautomatic Weight Bearing Computed Tomography Area Analysis of the Distal Tibiofibular Syndesmosis in Subtle Chronic Syndesmosis Instability</i>	Lily McGettigan
12:15 PM	<b>Adjourn</b>	

#### VISITING DISCUSSANTS

**Douglas A Dennis, MD**  
Adjunct Professor, Dept. of Bioengineering,  
University of Denver  
Adjunct Professor, Dept. of Mechanical and Materials  
Engineering, University of Tennessee  
Assistant Clinical Professor, Dept of Orthopaedics,  
University of Colorado School of Medicine  
Senior Surgeon, Colorado Joint Replacement, Denver, CO

**Heather A Vallier, MD**  
Professor of Orthopaedic Surgery  
Case Western Reserve University  
Clyde L. Nash Jr., MD, Professor of Orthopaedic  
Education

#### DEPARTMENT OF ORTHOPEDICS & REHABILITATION RESEARCH COMMITTEE

Joseph Buckwalter V, MD, PhD - Chair

John Albright, MD  
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Douglas Fredericks, BS  
Ignacio Garcia Fleury, MD  
Natalie Glass, PhD  
Jessica E. Goetz, PhD  
Matthew Karam, MD  
Heather R. Kowalski, MD

Steve Liu, MD  
J. Lawrence Marsh, MD  
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**Accreditation:** The University of Iowa Roy J. and Lucille A. Carver College of Medicine is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

**CME Credit Designation:** The University of Iowa Carver College of Medicine designates this live activity for a maximum of 11 AMA PRA Category 1 Credit(s)TM. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

**Disclosure Policy:** Everyone in a position to control the content of this educational activity will disclose to the accredited provider all financial relationships with ineligible companies whose primary business is producing, marketing, selling, re-selling, or distributing healthcare products used by or on patients. All relevant financial relationships will be mitigated. Program contact information: Joseph Buckwalter V, MD, PhD email: joseph-buckwalter@uiowa.edu; phone: (319) 356-0458

Thank you to our VIP  
Visiting Discussants!



**Douglas A. Dennis, MD**

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*Adjunct Professor, Dept. of Mechanical and Materials  
Engineering, University of Tennessee*

*Assistant Clinical Professor, Dept. of Orthopaedics,  
University of Colorado School of Medicine*

*Senior Surgeon, Colorado Joint Replacement, Denver, CO*



**Heather A. Vallier, MD**

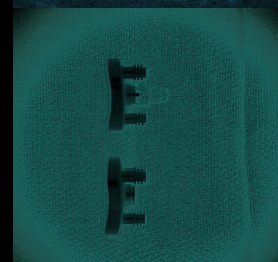
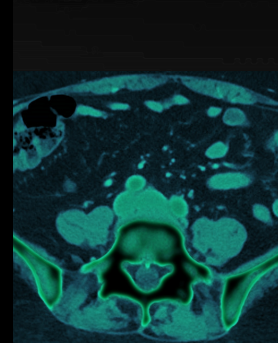
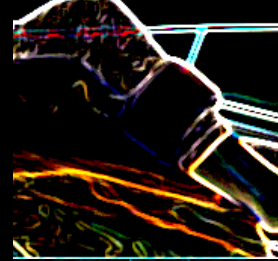
*Professor of Orthopaedic Surgery,*

*Case Western Reserve University*

*Clyde L. Nash Jr, MD, Professor of Orthopaedic Education*



48<sup>th</sup> Annual Senior Residents' Days  
Urmila Sahai Seminar Room, 2117 MERF  
University of Iowa Hospitals and Clinics  
Iowa City, IA



*Senior Residents' Days*

# *Research Program*

The University of Iowa  
Department of Orthopedics  
& Rehabilitation

June 10 – 11, 2022