



UW Department of Orthopedics and Rehabilitation Research Forum

Monday, May 5, 2025 – 8:00 AM to 5:00 PM
Fluno Center | Madison, WI

Keynote Speaker



Donald D. Anderson, PhD

Professor of Orthopedics and Rehabilitation
Professor of Industrial and Systems Engineering (ISE)
Professor of Biomedical Engineering (BME)
Richard and Jan Johnston Chair in Orthopedic Biomechanics
Vice Chair of Research, Orthopaedics and Rehabilitation
Iowa Carver College of Medicine Department of Orthopedics and Rehabilitation

Agenda

Welcome

Atrium/Auditorium

8:00 **Breakfast and networking**

8:25 **Tamara Scerpella, MD**

Welcome and Opening Remarks in the Auditorium

Blitz Talks Session 1 (3 minutes each)

Auditorium

Block 1: Knee Biomechanics

8:30 **Molly Day, MD**

How do surgically modifiable parameters in combined ACLR and LET alter knee biomechanics?

8:34 **Lesley Arant, MS**

How do osteoarthritic changes alter knee biomechanics?

8:38 **Joshua Roth, PhD**

Ultrasound-enhanced assessments of joint biomechanics

8:42 **Herman Feller, MS**
Validation of a low-cost, DIC-based system for benchtop testing of implant micromotion

Block 2: Bone Health

8:50 **Soroush Irandoust, PhD**
Virtual mechanical testing for stress fracture risk assessment

8:54 **Nicholas VanDerwerker, BS**
How Long to Delay Surgery? Orthopedic Preoperative Bone Health Optimization with Abaloparatide

8:58 **Eric Lin, PhD**
Enhancing Bone Repair by Boosting Stem Cell Activity: Insights from a Novel Animal Model

Periprosthetic Fracture Panel Discussion

Auditorium

9:05 **Moderator: Eric Cotter, MD**
Panel: Richard Illgen, MD, Jaquelyn Dunahoe, MD, Christopher Doro, MD

Coffee Break (20 min)

9:45 – 10:05

Blitz Talks Session 1 (3 minutes each)

Auditorium

Block 3: Clinical Research

10:05 **Brian Nickel, MD**
Prospective, Randomized Study Pearls

10:09 **Kyle Wagner, MD**
Variables Associated with Prolonged Time to Discharge Following Elective Joint Surgery

10:13 **Eric Cotter, MD**
RCT Home Therapy vs Physical Therapy After RTSA: Effects of Grit, Mental Health, and Motivation on Clinical Outcomes (PMADS Trial)

Block 4: Hip Function

10:21 **Matthew Kuik, DPT**
Profiling the Pre-Arthritic Hip

10:25 **Jarod Moyer, BS**
The Overlap of Pain Presentation in Patients with Hip or Back Pathology

Block 5: Rehabilitation

10:33 **Bonnie Weigert, MD**

Recreational Adult Dance Classes: The Good, The Bad, and the Unexpected

10:37 **Amber McKenna, MD**

Pics or It Didn't Happen: The Role of Social Media in Residency Recruitment

10:41 **Micheal Suer, MD**

FDG PET/MR imaging results changes management and improves outcomes in spinal pain patients who were refractory to standard-of-care approaches.

10:45 **Nathan Rudin, MD**

Bringing Hypermobility Diagnosis and Management Tools to Primary Care

Coffee Break (20 min)

10:55 – 11:15

Hypermobility Panel Discussion

Auditorium

11:15 **Moderator: Nathan Rudin, MD**

Panel: Andrew Sandgren, DPT, Tamara Scerpella, MD, Andrea Spiker, MD, Michael Suer, MD

Lunch – Atrium/Auditorium/219

11:55 – 12:55

Keynote Talk – Auditorium

12:55 **Joshua Roth, PhD**

Introduction of Dr. Anderson

1:00 **Keynote Speaker – Donald Anderson, PhD**

Post-Traumatic Osteoarthritis Risk from Pathomechanics: Supporting Studies and New Intervention Strategies

Ortho PGY-5 Presentations & PM&R and Pain Medicine Presentations

Auditorium & Room 219 (pages 5 & 6)

2:00 – 3:20

See page 5 for the Orthopedic Surgery PGY-5 Presentation Schedule

See page 6 for PM&R and Pain Medicine Presentation Schedule

Networking/Coffee Break

Atrium

3:20 – 4:00 **Beer/Wine/Coffee/Snacks and Group Photos**

Group Photos – 1st Floor Atrium Staircase

- **Ortho Fellowships: Joints (3:25), NOPO (3:30), Spine (3:35) and Ortho Sports (3:40)**
- **PM&R Residency (3:45)**
- **Pain Medicine Fellowship (3:50)**

Ortho Fellow Presentations & PM&R and Pain Medicine Presentations

Auditorium & Room 219 (pages 5 & 6)

4:00 – 5:00

See page 5 for the Orthopedic Surgery Fellow Presentation Schedule

See page 6 for PM&R and Pain Medicine Presentation Schedule

5:00 **End of formal event**

Happy Hour/Networking – Smitty's Study Pub (Mendota Room on the 8th Floor)

5:00 – 6:00 **Cocktails and Hors d'oeuvres**



Don Anderson is the Richard and Jan Johnson Chair in Orthopedic Biomechanics, Professor, and Vice-Chair of Research in the Department of Orthopedics & Rehabilitation at the University of Iowa. He holds a BSE in Biomedical Engineering, as well as an MS and PhD in Mechanical Engineering, all earned at the University of Iowa. Dr. Anderson has 35+ years of experience with image analysis, computer modeling, and computational stress analysis in musculoskeletal applications. Dr. Anderson's primary research focus throughout his career has been on articular

joint biomechanics, specifically studying the mechanical relationship between joint injury and the subsequent development of post-traumatic osteoarthritis. All of his post-graduate career has been spent working in a clinical orthopedic setting, which has guided his work toward informing and influencing patient care.

Ortho PGY-5 Presentations

Auditorium

- 2:00 **Tamara Scerpella, MD**
Graduating Ortho Resident/Fellow Remarks
- 2:05 **Zachary French, MD**
Rapid Liquid 3D Printing for Custom Wrist Orthosis Fabrication
- 2:17 **Rebecca Funk, MD**
Are Pre-visit Videos Resources a Useful Adjunct in Regards to Both Patient Education for Surgical Decision Making and In-office Efficiency for Patients with Isolated Clavicle Fractures?
- 2:29 **Terah Hennick, MD**
Factors Associated with the Selected Surgical Procedure in Patients Indicated for Both Hip Preservation and Hip Arthroplasty Surgery
- 2:41 **Laura Lins, MD**
Extension casting quality improvement project for pediatric proximal both bone forearm fractures
- 2:53 **Erin Wilson, MD**
When A Patient Calls: An Objective Analysis of After Hours & Weekend Patient Phone Calls
- 3:05 **Alec Winzenried, MD**
Incidental Findings in Pre-Operative Imaging for Elective Orthopedic Procedures

Networking/Coffee Break

Atrium

- 3:20 – 4:00 **Beer/Wine/Coffee/Snacks and Group Photos**
Group Photos – 1st Floor Atrium Staircase

Ortho Fellow Presentations

Auditorium

- 4:00 **Jake Enos, MD**
The Effect of Suction on Noise Pollution in Hip Arthroscopy: A Randomized Control Trial
- 4:12 **Charles (Will) Hansen, MD**
Biomechanical Testing of press-fit tibial implant for TKA
- 4:24 **Ariel Kwart, MD**
Predicting Surgical Time of One Level Laminectomy Based on Patient Factors
- 4:36 **Evan Miller, MD**
No Increased Risk for 30-Day Readmission & Complication Rates for Outpatient Single Level Standalone ALIF
- 4:48 **Patrick Touhy, MD**
Equivocal Ultrasound Follow-Up A UW Pediatric Orthopedic and Radiology Initiative
- 5:00 **End of Ortho PGY5 and Fellows formal event**

PM&R and Pain Medicine Presentations

Room 219

- 2:00 **Michelle Poliak-Tunis, MD**
Current and Graduating PM&R and Pain Medicine Resident/Fellow Remarks
- 2:05 **Daniel McKee, MD**
Standardization of Clinic Notes for Residents
- 2:17 **Samantha Kultgen, MD**
Use of PET/MRI for Identification of Pain Generators: A Case Report
- 2:29 **Isaac Metzler, DO**
Quality Improvement: The Quest for Timely Follow-up
- 2:41 **Thomas Mehner, DO**
Education on Spinal Cord Injury Bowel and Bladder Management: A Quality Improvement Project
- 2:53 **Shivani Khakhkhar, DO**
Pics or It Didn't Happen: Social Media Strategies for Residency Recruitment, Part 1
- 3:05 **Alexa Pfeiffer, DO**
Pics or It Didn't Happen: Social Media Strategies for Residency Recruitment, Part 2

Networking/Coffee Break

Atrium

- 3:20 – 4:00 **Beer/Wine/Coffee/Snacks and Group Photos**
Group Photos – 1st Floor Atrium Staircase

PM&R and Pain Medicine Continued

Room 219

- 4:00 **Amber McKenna, MD**
Pics or It Didn't Happen: Social Media Strategies for Residency Recruitment, Parts 3
- 4:12 **Lauren DiCalvo, DO**
Prospective Study on Outcomes of Radiofrequency Ablation of the Greater and Lesser Occipital Nerves for the Treatment of Occipital Neuralgia
- 4:24 **David Ryan, DO**
Lidocaine Infusion Quality Improvement
- 4:36 **End of PM&R and Pain Medicine formal event**