



UC San Diego

School of Medicine

Orthopaedic Surgery

OREF SOUTHWEST REGION
RESIDENT RESEARCH SYMPOSIUM
Wednesday, October 6, 2021

University of California, San Diego
Virtual Resident Research Symposium

Hosted by:
Susan Bukata, MD, FAOA, FAAOS
Professor and Chair
Department of Orthopaedic Surgery
University of California, San Diego

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About OREF:

The Orthopaedic Research and Education Foundation (OREF) was founded in 1955 to ensure an expanding base of knowledge and effective, evidence-based treatment protocols for orthopaedic surgeons to continually improve patient care. Since its founding, OREF has funded well over \$100 million in research and educational grants and awards that benefit all of orthopaedics. For more information about OREF grants and awards, please visit www.oref.org. Follow OREF on its Facebook page (OREFtoday) and on Twitter (@OREFtoday).

OREF SOUTHWEST REGION RESIDENT RESEARCH SYMPOSIUM
SUMMARY AGENDA
Wednesday, October 6, 2021

- 7:00 a.m. – 7:05 a.m. **Welcome and Introductions**
Susan Bukata, MD, FAOA, FAAOS
Professor and Chair
Department of Orthopaedic Surgery
University of California, San Diego
- 7:05 a.m. – 7:10 a.m. **Opening Remarks**
D.C. Covey, MD, MSc, FACS
CME Course Director
Department of Orthopaedic Surgery
University of California, San Diego
- 7:10 a.m. – 7:14 a.m. **OREF Welcome**
Mr. Lee Grossman
Chief Executive Officer
Orthopaedic Research and Education Foundation
- 7:14 a.m. – 7:52 a.m. **Session I – Resident Research Presentations & Discussion**
Moderator: BT Kent, MD
- 7:52 a.m. – 8:02 a.m. **Break**
- 8:02 a.m. – 8:40 a.m. **Session II – Resident Research Presentations & Discussion**
Moderator: CDR Brad Deafenbaugh, MD
- 8:40 a.m. – 8:50 a.m. **Break**
- 8:50 a.m. – 9:28 a.m. **Session III – Resident Research Presentation & Discussion**
Moderator: Alexandra Schwartz, MD
- 9:28 a.m. – 9:38 a.m. **Break**
- 9:38 a.m. – 10:16 a.m. **Session IV – Resident Research Presentations and Discussion**
Moderator: CDR James Bailey, MD
- 10:16 a.m. – 10:26 a.m. **Break**
- 10:26 a.m. – 11:21 a.m. **Keynote Address**
“Building a Research Team as an Early Career Investigator: Lessons Learned”
Prism Schneider, MD, PhD, FRCSC
Associate Professor of Orthopaedic Surgery and
Community Health Sciences
University of Calgary
- 11:21 a.m. – 11:31 a.m. **Awards Presentation and Closing Remarks**

Excited about today's research? Share it with your colleagues! Post on social media with #orthosymposia

Judges and Moderators

Judges

Michael Thompson, MD
Scripps Health

CDR James Bailey, MD
Naval Medical Center San Diego

Alexandra Schwartz, MD
University of California, San Diego

CDR Brad Deafenbaugh, MD
Naval Medical Center San Diego

Moderators

CDR James Bailey, MD
Naval Medical Center San Diego

CDR Brad Deafenbaugh, MD
Naval Medical Center San Diego

BT Kent, MD
University of California, San Diego

Alexandra Schwartz, MD
University of California, San Diego

Pelvic Stability During Total Hip Arthroplasty Motions: Comparing Different Hip Positioners

Ashish Mittal, MD

St. Mary's Medical Center, San Francisco

Purpose: The purpose of this study was to quantify the pelvic movement that occurred in four commercially available hip positioners with motion of the hip.

Significance: Total hip arthroplasty (THA) requires forceful maneuvers that can cause the pelvis to shift from its original position. As rotation of the pelvis may lead to implant malpositioning, quantification of relative motion is important.

Methods: An infrared marker was attached to the ilium of a cadaver secured in the lateral decubitus position. Four commercially available hip positioners were used. Multiplanar rotation and translation was captured using a camera system while the hip was moved through six motions (Flexion, Extension, Internal Rotation, External Rotation, Push, and Pull).

Results: The ExactFit hip positioner resulted in the least amount of motion of the pelvis, with a maximum rotation of the pelvis of up to 3.2°. The Stulberg and Pegboard positioners had rotations up to 7.8° and 17.1°, respectively. The Beanbag allowed rotations up to 41.5°.

Conclusion: Rotation of the pelvis during simulated motions of the pelvis varied widely based on hip positioner used. The ExactFit and Stulberg hip positioners provided increased stability and thus may reduce the risk of component malpositioning and related complications.