

OREF RESIDENT RESEARCH SYMPOSIA



2025 WINNERS

2025 RESIDENT RESEARCH SYMPOSIUM WINNERS

NATIONAL

2025 OREF National Resident Research Symposium Champion

Julia Retzky, MD

The Hospital for Special Surgery

Early Anterior Cruciate Ligament Reconstruction Mitigates the Development of Post-Traumatic Osteoarthritis in a Murine Anterior Cruciate Ligament Rupture Model

Top Scoring Residents

Joshua T. Bram, MD

The Hospital for Special Surgery

Skeletal Age Assessment from Knee Radiographs Using Deep Learning

Bhargavi Maheshwer, MD

University Hospitals Cleveland Medical Center

Predictors of Anterior Cruciate Ligament Re-Injury and Return to Sports in Adolescent Athletes: Increased Risk in Younger Age and Earlier Time to Return to Sport

Katherine J. Montoya, MD

University of Arkansas for Medical Sciences

Ten Years of a Novel Telemedicine System for Management of Statewide Hand Trauma in Arkansas – A Decade in Review

Erik Nakken, MD

University of Michigan

Optimizing Contact Pressures of the Posterior Heel During Lower Extremity Immobilization: A Biomechanical Study

Sreetha Sidharthan, MD

The Hospital for Special Surgery

Reverse-Anatomical Front and Back Reconstruction for Volar Intercalated Segment Instability Non-Dissociative: A Biomechanical Study

Presenters' Choice

Alexander E. White, MD

The Hospital for Special Surgery

The Effect of Posterior Tibial Slope on Tibiofemoral Joint Biomechanics: An In-Vitro Analysis

MID-ATLANTIC

First Place

Julia Retzky, MD

The Hospital for Special Surgery

Early Anterior Cruciate Ligament Reconstruction Mitigates the Development of Post-Traumatic Osteoarthritis in a Murine Anterior Cruciate Ligament Rupture Model

Second Place

Zachary J. Herman, MD

University of Pittsburgh Medical Center

Overhead Athletes Have Comparable Intraoperative Injury Patterns and Clinical Outcomes to Non-Overhead Athletes Following Surgical Stabilization for First-Time Anterior Shoulder Instability at Average 6-year Follow-up

Alexander E. White, MD

The Hospital for Special Surgery

The Effect of Posterior Tibial Slope on Tibiofemoral Joint Biomechanics: An In-Vitro Analysis

Third Place

Alexander Berk, MD

University Hospitals/Case Western Reserve University

Patients with Vitamin D Deficiency are More Likely to Develop Complex Regional Pain Syndrome After Extremity Fractures: A Large Database Propensity-Matched Cohort Study

Alexandra Baker Lutz, MD

University of Maryland

Impact of Obesity on Patient-Reported Outcomes Two Years After Multiple Ligament Knee Reconstruction

Margaret Sinkler, MD

Case Western Reserve University

To Fix or to Replace? An Analysis of Geriatric Periprosthetic Distal Femur Fractures Treated with Open Reduction Internal Fixation, Retrograde Intramedullary Nail, or Distal Femoral Replacement

Presenters' Choice

Alexander P. Hoffman, MD

University of Pittsburgh Medical Center

Intraoperative Evaluation of Sarcoma Surgical Margins with Indocyanine Green Fluorescence Imaging

MIDWEST

First Place

Katherine J. Montoya, MD

University of Arkansas for Medical Sciences

Ten Years of a Novel Telemedicine System for Management of Statewide Hand Trauma in Arkansas – A Decade in Review

Second Place

Bhargavi Maheshwer, MD

University Hospitals Cleveland Medical Center

Predictors of Anterior Cruciate Ligament Re-Injury and Return to Sports in Adolescent Athletes: Increased Risk in Younger Age and Earlier Time to Return to Sport

Erik Nakken, MD

University of Michigan

Optimizing Contact Pressures of the Posterior Heel During Lower Extremity Immobilization: A Biomechanical Study

Third Place

Apurva Choubey, MD

University of Illinois Chicago

Joint Arthroplasty in Breast Cancer: PE Risk and Thrombo-Prophylaxis Depend on Time Since Mastectomy

Kyleen Jan, MD

Rush University Medical Center

Midcarpal Stability Persists with $\leq 33\%$ Distal Scaphoid Resection: A 3D Computational Analysis

Mark Plantz, MD

Northwestern University

Pre-Clinical Safety and Efficacy Assessment of a Novel 3D-Printed Hydroxyapatite-Demineralized Bone Matrix (HA-DBM) Composite Scaffold Using a Rodent Posterolateral Fusion Model

Presenters' Choice

Jordan Serotte, MD

University of Chicago

AI-Assisted MRI Interpretation Improves Surgeon Performance in Diagnosing Bankart Lesions

NORTHEAST

Joshua T. Bram, MD

The Hospital for Special Surgery

Skeletal Age Assessment from Knee Radiographs Using Deep Learning

Second Place

Sreetha Sidharthan, MD

The Hospital for Special Surgery

Reverse-Anatomical Front and Back Reconstruction for Volar Intercalated Segment Instability Non-Dissociative: A Biomechanical Study

Nathan Varady, MD

The Hospital for Special Surgery

Low Complication Rate Following Contemporary Pure Anteriorization Tibial Tubercle Osteotomy for Patellofemoral Overload

Third Place

Aonnicha Burapachaisri, MD

Icahn School of Medicine at Mount Sinai Hospital

Does the Distal Tip Position of Long Cephalomedullary Nails Impact Mechanical Failure Rates?

Austin C. Kaidi, MD

The Hospital for Special Surgery

A Novel Clinical Calculator to Identify Patients at Risk for Ileus after Short-Segment Lumbar Fusion

Gergo B. Merkely, MD

Harvard Combined Orthopaedic Residency

AI-Driven Virtual Athlete Avatars for Injury Risk Stratification and Performance Analysis in Sports Medicine

Presenters' Choice

Rafa Rahman, MD, MPH

The Hospital for Special Surgery

Novel Scapholunate Bridge Augmentation to Treat Scapholunate Interosseous Ligament Injury

SOUTHEAST

First Place

Joseph Geller, MD

Jackson Memorial Hospital/University of Miami

Tracking Wearable Device Compliance in Total Knee Arthroplasty Recovery

Second Place

David S. Constantinescu, MD

University of Miami

When the Robot Fails Us: A Comprehensive Analysis of a United States Food and Drug Administration Database of Technology-Assisted Arthroplasty

Olivia de Araujo, MD

Jackson Memorial Hospital/University of Miami

Consideration of Updated Breast Cancer Screening in Female Orthopaedic Surgeons: A Comprehensive Review

Third Place

James Frix, MD

Atrium Health Carolinas Medical Center

Early Implementation of Virtual Reality Therapy for Phantom Limb Pain: A Feasible and Effective Adjunct to Traditional Interventions

Aneesh V. Samineni, MD

Jackson Memorial Hospital/University of Miami

Prediabetes as an Unrecognizable Risk Factor for Inpatient Postoperative Complications After Total Knee Arthroplasty

Ryan Serbin, MD

Atrium Health Carolinas Medical Center

Targeted Brain Rehabilitation: A Novel Virtual Reality Protocol for Phantom Limb Pain Following Upper Extremity Amputation

Presenters' Choice

Blake H. Hodgens, MD

Atrium Health Carolinas Medical Center

Weightbearing After Distal Femur Fractures: Does the Surgeons' Postoperative Protocol Matter?

WESTERN

First Place

Kyla Petrie, MD

University of California, San Francisco

Comparison of Retear Rates and All-Cause Reoperation Rates in Pediatric and Adolescent AL Reconstructions Using Bone Patellar Tendon and Quadriceps Tendon Grafts

Second Place

Grant Schroeder, MD

Stanford University

Shorter Relative Patellar Defect Length after Bone Patellar Tendon Bone Anterior Cruciate Ligament Reconstruction is Associated with Better Postoperative Patient-Reported Outcomes at 1-year Follow-up

Mathangi Sridharan, MD

University of California, Los Angeles

Predictive Factors of Having a Second UBC-Related Pathologic Fracture

Third Place

Kelechi Nwachuku, MD

University of California, San Francisco

Osteoarthritis and Total Joint Arthroplasty in Housing Insecure Patients at a Safety-Net Hospital in a Major Urban City

Alexa K. Pius, MD

Stanford University

Navigated and Robotic Total Knee Arthroplasty (TKA) Do Not Confer Improved 5-Year Survivorship Compared to Conventional TKA: An Analysis from the American Joint Replacement Registry (AJRR)

Karch M. Smith, MD

University of California, San Diego

Combined Root and Body (CRAB) Lateral Meniscus Tears in the Adolescent Population: An Underrecognized and Underreported Tear Pattern

Presenters' Choice

Oliver Dong, MD

San Francisco Orthopaedic Residency Program at

University of California, San Francisco Health

St. Mary's Hospital

Osteochondral Autograft from the Proximal Tibiofibular Joint for Reconstruction of Acute Tibial Plateau Fractures with Severe Chondral Defects

Nicole J. Newman-Hung, MD

University of California, Los Angeles

Characteristics and Recurrence Risk of Upper Extremity Soft Tissue Sarcoma

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