

GRANTS AWARDED

2022
2021



ORTHOPAEDIC RESEARCH
AND EDUCATION FOUNDATION ®

GRANT AND AWARD RECIPIENTS | 2022

OREF CLINICAL RESEARCH AWARD

PI: Martha M. Murray, MD, FAAOS
Boston University Medical Center, Harvard Medical Center
*Bridge-Enhanced ACL Restoration:
Translation from Academic Lab to FDA Approval*

OREF LIFETIME SERVICE AWARDS

John W. Brown
Stryker

John J. Callaghan, MD
University of Iowa

ORS/OREF DISTINGUISHED INVESTIGATOR AWARDS

Gunnar B.J. Andersson, MD, PhD
Rush University Medical Center

John J. Callaghan, MD
University of Iowa

RESEARCH GRANTS

AMERICAN ORTHOPAEDIC SOCIETY FOR SPORTS MEDICINE IN COLLABORATION WITH OREF AND THE AAOS SPORTS MEDICINE MULTICENTER RESEARCH GRANT

PI: Beth Shubin Stein, MD
Co-PI: Shital N. Parikh, MD
The Hospital for Special Surgery
JUPITER 4.0: Risk Factors for Failure of Isolated MPFL Reconstruction

OREF/AAOS INJECTABLE ORTHOBIOLOGICS OF KNEE OSTEOARTHRITIS RESEARCH GRANT

PI: Kyle Duchman, MD
Co-PI: Joseph A. Buckwalter, IV, MD
University of Iowa
Platelet Rich Plasma for Osteoarthritis: Role of Exosomes in Effectiveness
Funding made possible by the American Academy of Orthopaedic Surgeons

OREF OSTEOARTHRITIS RESEARCH GRANT

PI: Muhammad Farooq Rai, PhD, DVM
Co-PI: Regis J. O'Keefe, MD, PhD
Washington University in St. Louis
KLF10 as a Novel Therapeutic Target in Osteoarthritis
Funding made possible by the American Arthritis Society

OREF ETIOLOGY OF HIP OSTEOARTHRITIS GRANT

In Honor of William H. Harris, MD
PI: Cecilia Pascual Garrido, MD, PhD
Washington University in St. Louis
Epigenetic Regulation of Key Molecular Players in the Progression of Hip OA

THE IMPACT OF REGULATORY POLICIES ON PATIENT- PHYSICIAN RELATIONSHIP RESEARCH GRANT IN HONOR OF SIGVARD HANSEN, MD

PI: Paul Courtney, MD
Co-PI: Graham Goh, MD
Thomas Jefferson University
Rothman Institute
Impact of Prior Authorization of Patient Care and Outcomes in Orthopaedics

OREF/OTA TRAUMA RESEARCH GRANT

PI: Scott Rodeo, MD
Co-PI: Laura Moore, MD, PhD
The Hospital for Special Surgery
Modulating Pro-Fibrotic Signaling After Ligamentous Knee Injury
Funding made possible by Arthrex

OREF SKELETAL METASTASES AND PATHOLOGICAL FRACTURE RESEARCH GRANT IN COLLABORATION WITH MSTs

PI: Kurt Weiss, MD, PhD
University of Pittsburgh
Musculoskeletal Oncology Virtual Evaluation Study (MOVES)

MENTORED CLINICIAN SCIENTIST GRANTS

PI: David Brogan, MD

Washington University in St. Louis

Identification & Imaging of Skeletal Muscle Response to Graded Nerve Crush

Funding made possible by the

Dr. Zachary B. and Mrs. Kathleen Friedenberg Endowment Fund

PI: Aidin Eslam-Pour, MD

Yale University

Personal Surgical Planning to Avoid THA Dislocation: Concept of Safe Zone

OREF RESIDENT CLINICIAN SCIENTIST TRAINING GRANTS

PI: Lynn Ann Forrester, MD

Columbia University Medical Center

The Role of Tendinopathy and Tissue Crosstalk in Osteoarthritis Progression

Funding provided by the Ira A. Roschelle Family Foundation

PI: Cory Mayfield, MD

Co-PI: Jennifer Alter Bell, MD

University of Southern California (USC)

scRNA-seq of Corticosteroid-Induced Osteonecrosis of the Femoral Head

Funding provided by the Ira A. Roschelle Family Foundation

PI: Vincentius Suhardi, MD, PhD

Co-PI: Xu Yang, MD

Co-PI: Mathias Bostrom, MD

The Hospital for Special Surgery

Inhibition of Gremlin 1 for Prevention and Treatment of Aseptic Loosening

Funding made possible by Thomas P. Sculco, MD

PI: Joash Suryavanshi, MD

Indiana University

A Novel Antibiotic to Reduce Fracture Related Infection in a Murine Model

Funding made possible by the John T. Hocker Charitable Foundation

In Memory of John T. Hocker, MD

RESIDENT RESEARCH PROJECT GRANTS

OREF RESIDENT RESEARCH PROJECT GRANTS

PI: Ryan Halvorson, MD

Co-PI: Jeannie Bailey, MD

The Regents of the University of California, San Francisco

Phenotyping Post-Operative ACL Recovery Trajectories

Funding in Honor of Bernard R. Bach Jr., MD

PI: Aaron Hoyt, MD

Co-PI: Ashley Levack, MD

Loyola University of Chicago

In Vitro Thermal Stability of Dalbavancin in PMMA Cement

Funding made possible by The American Arthritis Society

PI: Christa LiBrizzi, MD

Co-PI: Carol Morris, MD

Co-PI: Aaron James, MD

Co-PI: Jeremais Sulam, MD

Johns Hopkins University School of Medicine

Use of Deep Learning for Necrosis Assessment in Patients with Osteosarcoma

PI: David Liu, MD

Co-PI: Brian Snyder, MD

Boston Children's Hospital

Value of Vitamin D in Prevention and Treatment of Pediatric Fractures

Funding made possible by Brown University in Memory of Dr. Michael Ehrlich

PI: Michael Livesey, MD

Co-PI: Mohit Gilotra, MD

University of Maryland, Baltimore

Perioperative Patient Education and Sling Compliance after Shoulder Surgery

In Honor of Jack C. Hughston, MD and James R. Andrews, MD

Funding made possible by Michael J. Axe, MD and Jeremie M. Axe, MD

PI: Daniel Meeker, MD

Co-PI: Jacob Elkins, MD

Co-PI: Eric Nuxoll, MD

The University of Iowa

Effects of Heating on Biofilm-Associated Orthopedic Infections

PI: Daniel Portney, MD

Co-PI: Jason Strelzow, MD

Co-PI: Jeffrey Stepan, MD

The University of Chicago

Identification of Peripheral Nerve Pathology Using 3D Ultrasound

Funding made possible by the Ira A. Roschelle Family Foundation

PI: Mariel Rickert, MD

Co-PI: Jonathan Schoenecker, MD

Vanderbilt University Medical Center

Immunocoagulopathy: The Cause of the Third Wave of Death in Level-1 Trauma?

Funding made possible by the Ira A. Roschelle Family Foundation

PI: Edward Rojas, MD

Co-PI: de Cesar Netto Cesar, MD, PhD

The University of Iowa

Lateral Ankle Ligaments' Role in Distal Tibiofibular Syndesmosis Stability

PI: Michael Seward, MD

Co-PI: Matthew Abdel, MD

Mayo Clinic Rochester

What is the Amount of Clinically Significant Preop Weight Loss Before TJA?

PI: Christopher Stewart, MD
Co-PI: Saam Morshed, MD
The Regents of the University of California, San Francisco
Limb Optimization: Factors that Influence Limb Reconstruction or Amputation

PI: Rishi Trikha, MD
Co-PI: Nicholas Bernthal, MD
The Regents of the University of California, Los Angeles
Periprosthetic Infection Risk in Medically Treated Rheumatoid Arthritis
Funding made possible by the Western Orthopaedic Association/WOF

PI: Jesse Wang, MD
Co-PI: Xudong Li, MD
University of Virginia
Modulation of Macrophages on Pathogenesis of Degenerative Disc Disease
Funding made possible by the Ira A. Roschelle Family Foundation

PI: Arakua Welbeck, MD
Co-PI: Christopher Dy, MD
Washington University, School of Medicine
Wearable Sensors to Measure Function after Brachial Plexus Reconstruction
Funding made possible by Dr. Adam and Julie Harris
in Memory of Eugene Harris, MD

PI: Brian Yang, MD
Co-PI: Duretti Fufa, MD
The Hospital for Special Surgery
Tenodesis Effect as a Diagnostic Test to Detect Occult Dorsal Ganglion Cyst
Funding made possible by the Ira A. Roschelle Family Foundation

PI: Jie Yao, MD
Co-PI: Jason Hsu, MD
University of Washington Medical Center- Orthopaedics
Effect of Reverse Shoulder Component Positioning on Subacromial Impingement
Funding made possible by the Ira A. Roschelle Family Foundation

SHIMOMURA/OREF/INTERNATIONAL SOCIETY OF ORTHOPAEDIC SURGERY AND TRAUMATOLOGY (SICOT) TRAVEL AWARDS

Muhammad Arsalan Ghazi, MD
Liaquat National Hospital & Medical College
Multiligamentous Knee Injury Treated with Autologous Graft Our Novel Technique

Saurabh Gupta, MS
All India Institute of Medical Sciences Jodhpur
Comparison of Impact of Joint Line Orientation on Patient Reported Outcome

REGIONAL NEW INVESTIGATOR AWARDS

EASTERN ORTHOPAEDIC ASSOCIATION OREF RESIDENT TRAVEL GRANT AWARDS

Daniel E. Goltz, MD, MBA
Duke University
*2-Stage Revision for Periprosthetic Infection in Shoulder Arthroplasty:
An Institutional Experience*

Tara Gaston Moncman, DO
Thomas Jefferson University / The Rothman Institute
Improved Pain and Function after TTC Fusion with a Custom Cage

Adam J. Santoro, DO
Rowan SOM - Inspira Health
*Patient Specific Emailed Discharge Instructions Improve
Patient Satisfaction after Arthroscopy*

SOUTHERN ORTHOPAEDIC ASSOCIATION OREF RESIDENT AWARDS

Daniel Pereira, MD
Washington University Orthopaedics
*Outcomes of Close Reduction and Casting of Pediatric Tibia Shaft Fractures:
Report from Two Large Trauma Centers*

Eric Taris, DO
East Tennessee State University
*Effects of Metacarpophalangeal Arthrodesis on Thumb Ligament
Reconstruction Tendon Interposition*

Kevin C. Wall, MD, MPH
University of Alabama at Birmingham
*Liposomal Bupivacaine Provides Better Comfort than Interscalene Catheter
following Arthroscopic Shoulder Surgery*

WESTERN ORTHOPAEDIC ASSOCIATION OREF YOUNG INVESTIGATOR AWARDS

Ananth Eleswarapu, MD
Montefiore Medical Center
*Intraoperative 3D Navigation and Post-Operative Infection
in Thoracolumbar Fusion*

Justin Haller, MD
University of Utah
Articular Fragment Restoration is Critical to Mitigate Post-Traumatic Osteoarthritis

Richard Michelin, DO
Riverside University Health System Medical Center
*Adolescent Shoulder Instability Arthroscopic Management:
Knotless versus Knotted Suture Anchors*

OREF/CURRENT CONCEPTS IN JOINT REPLACEMENT CLINICAL PRACTICE POST AWARD

Ki nam Bae

Asan Medical Center

Long-Term Survivorship of Varus Aligned Total Knee Arthroplasty can be Affected by the Degree of Joint Line Obliquity: Postoperative Phenotype Analysis

Funding made possible by Thomas Sculco, MD and Cynthia Sculco

Mohammed Hammad, MD

Hospital for Special Surgery

Povidone-Iodine and Hydrogen Peroxide Irrigation Solutions do not Compromise Osseointegration

Funding made possible by Thomas Sculco, MD and Cynthia Sculco

Linsen T. Samuel, MD, MBA

Carilion Clinic

A Reduction in Body Mass Index from ≥ 40 to < 40 May Increase All-cause Readmissions after Primary Total Hip Arthroplasty

Funding made possible by Thomas Sculco, MD and Cynthia Sculco

Tony S. Shen, MD

Hospital for Special Surgery

Characterization of Genetic Risk of End-Stage Knee Osteoarthritis Treated with Total Knee Arthroplasty

Funding made possible by Thomas Sculco, MD and Cynthia Sculco

Michael N Sirignano, MD

University of Louisville

Incidence of Instability Following Primary THA Continues to Decline in the Medicare Population

Funding made possible by Thomas Sculco, MD and Cynthia Sculco

Adam A. Rizk, BA

Cleveland Clinic Foundation

Are Trends in Revision Total Joint Arthroplasty Sustainable? Declining Inflation-Adjusted Medicare Reimbursement for Hospitalizations

Funding made possible by Thomas Sculco, MD and Cynthia Sculco

2022 RESIDENT RESEARCH SYMPOSIA WINNERS

NATIONAL SYMPOSIUM

2022 Richard Kyle, MD OREF National Resident Research Symposium Grand Champion

Kyle W. Morse, MD

Hospital for Special Surgery

A Vertebral Stem Cell Mediating Spine Fusion

TOP SCORING RESIDENTS

Michael Davies, MD

University of California, San Francisco

Defining Endogenous Mitochondrial Transfer in Muscle Following Rotator Cuff Injury

Steven Garcia, MD

University of California, San Francisco

Heterogeneous Human Fibroadipogenic Cells Subpopulations are Altered in Injury

Eoghan T. Hurley, MD

Duke University

Buccally Absorbed Cannabidiol Shows Promise in Treating Pain and Improving Satisfaction Immediately Following Arthroscopic Rotator Cuff Repair: A Placebo-Controlled, Double-Blinded, Randomized Trial

Andrew Luzzi, MD

Columbia University Irving Medical Center

Enhanced Tendon-to-Bone Attachment Healing Through Hedgehog Activation

PRESENTERS' CHOICE

Katya Eve Strage, MD

University of Colorado

Is a History of Pelvic Fracture an Indication for a Primary Elective Caesarean Section?

MIDWEST REGION RESIDENT RESEARCH SYMPOSIUM

1st Place Award

Kameron Shams, MD

University of Michigan

Serum Titanium Levels Remain Persistently Elevated but Urine Titanium is Undetectable in Children with Early-Onset Scoliosis (EOS) Undergoing Growth-Friendly Surgical Treatment: A Prospective Study

2nd Place Awards

Paul M. Inclan, MD,

Washington University in St. Louis

Risk for Total Knee Arthroplasty Following Anterior Cruciate Ligament Reconstruction

Stacia Marie Ruse, MD

University of Michigan

Pregnancy in Orthopedic Residents: Peripartum Barrier Identified

3rd Place Awards

Farhan Ahmad, MD

Rush University Medical Center

Elective Orthopaedic Procedures Before and During the COVID-19 Pandemic: Complications and Delays from 146,430 American Seniors

Michael Fice, MD

Rush University Medical Center

Does Synovial Sarcoma Grade Predict Oncologic Outcomes, and Does a Low-Grade Variant Exist

Michael Murphy, MD

Loyola University Medical Center

Artificial Intelligence More Accurately Measures Acetabular Component Orientation Than Hand Measurements

Presenters' Choice

Daniel Portney, MD

University of Colorado

The Ballistic Articular Structure Injury Classification (BASIC) System: Clarifying Ballistic Articular Injuries

CENTRAL WEST REGION RESIDENT RESEARCH SYMPOSIUM

1st Place Award

Katya Eve Strage, MD

University of Colorado

Is a History of Pelvic Fracture an Indication for a Primary Elective Caesarean Section?

2nd Place Awards

Zachary Clarke, MD

University of Colorado

The Importance of Patient Resilience on Outcomes Following Hip and Knee Arthroplasty

Kylie Shaw, MD

University of Colorado

Patient-Reported Outcomes of Pain and Related Quality of Life One-Year Following Osseointegration in Patients with Lower-Extremity Amputations

3rd Place Awards

Ryan Price, MD

University of New Mexico

Benefits of Dual Attending Surgeons During Three- and Four-Ligament Reconstruction Knee Surgery

Dylan Rakowski, MD

University of Colorado

Outcomes of Extra-Articular Distal Femur Fracture Fixation: A Network Meta-Analysis and Probability-Based Projected Costs Comparing Different Intramedullary Nailing and Plating Techniques

Tyler Scott, MD

University of Colorado

A Randomized Trial Comparing Barbed to Traditional Sutures in TKA Closure

Presenters' Choice

Katya Eve Strage, MD

University of Colorado

Is a History of Pelvic Fracture an Indication for a Primary Elective Caesarean Section?

SOUTHWEST REGION RESIDENT RESEARCH SYMPOSIUM

1st Place Awards

Michael Davies, MD

University of California, San Francisco

Defining Endogenous Mitochondrial Transfer in Muscle Following Rotator Cuff Injury

Steven Garcia, MD

University of California, San Francisco

Heterogeneous Human Fibroadipogenic Cells Subpopulations are Altered in Injury

2nd Place Awards

Alicia Asturias, MD

University of California, San Francisco

Breaking the Glass: Gender Differences in Endowed Chair Positions and NIH Funding in Musculoskeletal Research

Brendon Mitchell, MD

University of California, San Diego

Can Laser-Assisted Indocyanine Green Angiography Be Used to Quantify Perfusion Changes by Anatomical Location During Staged Fixation of Pilon Fractures? A Pilot Study

3rd Place Awards

Jennifer M. O'Donnell, MD

University of California, San Francisco

Impact of Social Determinants of Health on Preoperative Opioid Utilization in Patients with Lumbar Degeneration

Sarah Stroud, MD

University of California, San Francisco

An Analysis of the Prognostic Factors for Adult Patients with High-Grade Extremity Sarcomas in the California Cancer Registry, 1988-2017

Joseph Wick, MD

University of California, Davis

Patient Characteristics, Injury Types, and Costs Associated with Secondary Over-Triage of Isolated Cervical Spine Fractures

Presenters' Choice

Grant Schroeder, MD

Stanford Health Care

ACL Injuries Among Pac-12 Athletes: A 5-Year Epidemiologic Study

EASTERN REGION RESIDENT RESEARCH SYMPOSIUM

1st Place Award

Eoghan T. Hurley, MD
Duke University

Buccally Absorbed Cannabidiol Shows Promise in Treating Pain and Improving Satisfaction Immediately Following Arthroscopic Rotator Cuff Repair: A Placebo-Controlled, Double-Blinded, Randomized Trial

2nd Place Awards

Samuel Cohen-Tanugi, MD
Atrium Health Carolinas Medical Center
The Prevalence of Depression and PTSD in Adults with Surgically Managed Traumatic Upper-Extremity Amputations

Zaamin B. Hussain, MD
Emory University
Artificial Intelligence Automated Analysis of Scapula Dynamics Using Dynamic Digital Radiography: Initial Reliability Study

3rd Place Awards

Matthew Akelman, MD
Atrium Health Wake Forest Baptist
Costs and Predictors of 90-Day Readmissions After Shoulder Arthroplasty with a Hospitalist Comanagement Model

Richard Danilkowicz, MD
Duke University
Association of Synovial Fluid and Plasma Tryptophan-Kynurenine Pathway Metabolites with Osteoarthritis Pain and Severity

Julia Mastracci, MD
Atrium Health Carolinas Medical Center
Tibial Nonunion Exchange Nailing Fails More Than One Third of the Time

Elaine Shing, MD, PhD
Atrium Health Carolinas Medical Center
Health Literacy Awareness Amongst Orthopedic Surgery Residents

Presenters' Choice

Zaamin B. Hussain, MD
Emory University
Artificial Intelligence Automated Analysis of Scapula Dynamics Using Dynamic Digital Radiography: Initial Reliability Study

NORTHEAST REGION RESIDENT RESEARCH SYMPOSIUM

1st Place Award

Kyle W. Morse, MD
Hospital for Special Surgery
A Vertebral Stem Cell Mediating Spine Fusion

2nd Place Awards

Andrew Luzzi, MD
Columbia University Irving Medical Center
Enhanced Tendon-to-Bone Attachment Healing Through Hedgehog Activation

Hemant Reddy, MD
Montefiore Medical Center/Albert Einstein College of Medicine
Factors Predicting Failed Same Day Discharge for Ambulatory Total Hip and Knee Arthroplasty

3rd Place Awards

Troy Amen, MD
Hospital for Special Surgery
Evaluating the Impact of Case-Based Unconscious Bias and Racial Equity Training on Orthopaedic Surgery Trainees

William K. Crockatt, MD
New York Presbyterian/Columbia University
Comparing Skill Acquisition and Validity of Immersive Virtual Reality to Cadaver Laboratory Sessions in Training for Reverse Total Shoulder Arthroplasty

Steven Henick, MD
Montefiore Medical Center/Albert Einstein College of Medicine
Non-Operative Management of First-Time Patellar Dislocation in the Pediatric Population: Risk of Recurrence and Functional Outcomes

Kevin Wang, MD
Mount Sinai
Risk Factors and Rate of Conversion to Total Hip Arthroplasty Within 2 years After Hip Arthroscopy Utilizing a Large National Cohort of Commercially Insured Patients

Presenters' Choice

Josephine Coury, MD
Columbia University Irving Medical Center
UIV Within 3 Levels of the Thoracic Apex is the Most Significant Risk Factor for Proximal Junctional Kyphosis in Lenke Type 5 and 6 Adolescent Idiopathic Scoliosis Patients

CALIFORNIA ORTHOPAEDIC ASSOCIATION

OREF Resident Award Winner

Christopher Hart, MD
University of California, Los Angeles
Novel Antibody Disrupts Biofilm in Spinal Implant Infection Model

MINNESOTA ORTHOPAEDIC SOCIETY

OREF Resident Award Winners

Harold I. Salmons IV, MD
Mayo Clinic, Rochester
Implementation of Machine Learning to Predict Cost of Care Associated with Ambulatory Single Level Lumbar Decompression

Samuel Davidson, MD
University of Minnesota
Discrepancy between DXA and CT Based Assessment of Spine Bone Mineral Density

2023 GRANT AND AWARD RECIPIENTS

OREF CLINICAL RESEARCH AWARD

Recognizes outstanding clinical research related to musculoskeletal disease or injury

Marc J Philippon, MD, FAAOS

Steadman Philippon Research Institute, Colorado

Hip Chondral-Labral Dysfunction: The Road from Excision to Repair, Replacement, and Regeneration

ORS/OREF DISTINGUISHED INVESTIGATOR AWARDS

Honoring individuals who have made a significant contribution to the field of orthopaedic research and to the ORS and/or OREF through their scientific achievements and their commitment of time and service

Peter C. Amadio, MD

Mayo Clinic, Minnesota

CAREER DEVELOPMENT GRANT

Collin May, MD

Boston Children's Hospital

CT Rigidity Analysis for the Assessment of Regenerate Bone Strength

PROSPECTIVE CLINICAL RESEARCH GRANT

Jonathan Elliott, PhD

Dartmouth-Hitchcock Clinic

Fluorescence-based Identification of Necrotizing Soft-Tissue Infection

NEW INVESTIGATOR RESEARCH GRANT

PI: Natalie Leong, MD

Co-PI: Jie Jiang, PhD

University of Maryland, Baltimore

The Role of CCN2 in Tendon Healing

OREF FUNDING OPPORTUNITIES

Visit www.oref.org/grants for deadlines and details*

UPCOMING GRANTS (OPENING MARCH 15, 2023)

OREF Skeletal Metastases and Pathological Fracture Research Grant: **\$25,000**

OREF Diversity, Equity, and Inclusion (DEI) Research Grant: **\$150,000**

MTEC Research Grant on Improving Recovery Following Acute Injury: **\$20,000**

Resident Clinician Scientist Training Grants: **\$20,000**
(four available)

Mentored Clinician Scientist Supplement Award: **\$20,000**

Resident Research Project Grants—Round 2: **\$5,000**
(five available)

*Opportunities printed at press time are subject to change

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Douglas Adams, PhD
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Cynthia L. Emory, MD
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Christopher Evans, PhD
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Zachery Working, MD
Rick W. Wright, MD
Rosanna Wustrack, MD
Chao Xie, MD, MSBA

GRANT AND AWARD RECIPIENTS | 2021

OREF CAREER DEVELOPMENT GRANT

PI: Irvin Oh, MD

Co-PI: Francis Lee, MD, PhD

Yale University

Developing Biomarkers for Diagnosis and Prognosis of Orthopaedic Infection

Funding made possible in part by the Musculoskeletal Transplant Foundation (MTF) Biologics and the Dr. Dane and Mrs. Mary Louise Miller Endowment Fund

OREF CLINICAL RESEARCH AWARD

PI: Barry P. Boden, MD

The Orthopaedic Center division in Rockville and Germantown, MD

Epidemiology, Mechanisms, and Prevention of Sports Injuries

RESEARCH GRANTS

OREF ETIOLOGY OF HIP OSTEOARTHRITIS GRANT IN HONOR OF WILLIAM H. HARRIS, MD

PI: Chai-Lung Wu, PhD

Co-PI: Brian D. Giordano, MD

University of Rochester

Identification of FGF18 Gene Regulatory Network in Hip OA Using ScRNA-Seq

OREF/AAOS INJECTABLE ORTHOBIOLOGICS OF KNEE OSTEOARTHRITIS GRANT

PI: Scott Rodeo, MD

Hospital for Special Surgery

PRP Treatment of the ACL-Injured Knee to Decrease the Risk of PTOA

Funding made possible by the American Academy of Orthopaedic Surgeons

OREF OSTEOARTHRITIS RESEARCH GRANT

PI: Weiguang Wang, PhD

University of California, Los Angeles

BMP Receptor Ligand Traps as a Therapy for Post-Traumatic Osteoarthritis

Funding made possible by the American Arthritis Society

OREF/THE AIRCAST FOUNDATION (TAF) ORTHOPAEDIC RESEARCH GRANT

PI: Chelsea Bahney, PhD

Steadman Philippon Research Institute

Understanding Contribution of Senescent Cells to Rate of Fracture Repair

Funding made possible by The Aircast Foundation

MENTORED CLINICIAN SCIENTIST GRANTS

PI: Aidin Eslam-Pour, MD

Yale University

Personal Surgical Planning to Avoid THA Dislocation: Concept of Safe Zone

Funding made possible by the Dr. Zachary B. and

Mrs. Kathleen Friedenber Endowment Fund

PI: Cecilia Pascual Garrido, MD, PhD

Washington University in St. Louis

Mediators of the OA Cascade in the Pre-Arthritis Hip

Funding made possible by The Aircast Foundation

PI: Robin Kamal, MD

The Board of Trustees of the Leland Stanford Junior University

Developing and Testing a Tool for Preference Elicitation in CTS

Funding made possible by The Aircast Foundation

OREF TOTAL JOINT REPLACEMENT RESEARCH GRANT IN MEMORY OF JORGE O. GALANTE, MD

PI: Victor H. Hernandez, MD

Co-PI: Michele R. D'Apuzzo, MD

Miller School of Medicine of the University of Miami

Glucose Variability and TJA: Continuous Glucose Monitoring Using Dexcom G6

NEW INVESTIGATOR RESEARCH GRANT

PI: Brian Lau, MD

Co-PI: Louis E. DeFrate, MD

Duke University

Quantitative MRI of Glenohumeral Cartilage & Labrum in Shoulder Instability

Funding made possible by Thomas P. Sculco, MD

OREF RESIDENT CLINICIAN SCIENTIST TRAINING GRANTS

PI: Tracy Borsinger, MD
Co-PI: Wayne E. Moschetti, MD
Dartmouth-Hitchcock Clinic
Characterizing the Microbiome of Native, Aseptic Bilateral Knee Joints
In Memory of Joseph Seaton Barr Sr., MD
Funding made possible by Joseph S. Barr Jr., MD

PI: Abigail Cortez, MD
The Regents of the University of California, Los Angeles
Cost-Effective Analysis of Below-Knee Prosthesis for Tanzanian Amputees
In Memory of John T. Hocker, MD
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PI: Kyle Morse, MD
Hospital for Special Surgery
Epidural Steroids to Reduce Opioid Consumption Following Laminectomy
Funding made possible by the Ira A. Roschelle Family Foundation

PI: Tony Shen, MD
Co-PI: Timothy M. Wright, PhD
Co-PI: Douglas Padgett, MD
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Effect of Surface Finish on Head-Neck Corrosion in Total Hip Arthroplasty
Funding made possible by Thomas P. Sculco, MD

PI: Brendan Shi, MD
Co-PI: Thomas Kremen, MD
Co-PI: Ichiro Nishimura, DDS, DMSc, DMD, PhD
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Targeting Molecules to the Enthesis via Novel Bisphosphonate Chaperones
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ORS/OREF DISTINGUISHED INVESTIGATOR AWARD

Farshid Guilak, PhD
Washington University Medical School in St. Louis

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Ghanshyambhai Kakadiya, MD
Topiwala National Medical College & BYL Nair Hospital
A Biomechanical Study-Effectiveness of Sublaminar Mersilene Tape Augmented

Amit Lakhani, MD
Dr BR Ambedkar State Institute of Medical Sciences
Ortho Regeneration and Ancient Healing System

RESIDENT RESEARCH PROJECT GRANTS

OREF RESIDENT RESEARCH PROJECT GRANTS

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Co-PI: Jeffrey Nepple, MD
Co-PI: John Clohisy, MD
Washington University in St. Louis School of Medicine
Long-Term Periacetabular Osteotomy Radiologic and Patient-Reported Outcomes
Funding Made Possible by Brown University in Memory of Dr. Michael Ehrlich

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Columbia University Medical Center
Skill Acquisition in Immersive Virtual Reality vs Cadaver Lab
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Co-PI: Joshua Rozell, MD
New York University School of Medicine
Losar Use to Mitigate Arthrofibrosis Following Total Joint Arthroplasty
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PI: Corey Hamilton, MD
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Prisma Health-Midlands
Astaxanthin for Pain, Function, and Inflammation in Knee Osteoarthritis
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PI: Matthew Kolevar, MD
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University of Maryland, Baltimore
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PI: Olivia O'Reilly, MD
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The University of Iowa
Physical Therapy After Shoulder Arthroplasty: Assessing Telerehabilitation
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PI: Jonathan Savakus, MD
Vanderbilt University Medical Center
The Acute Phase Response and Femoral Shaft Fractures: When Can I Nail It?

PI: Quante Singleton, MD
Co-PI: Michael Kelly, MD, MSc
Washington University in St. Louis
Biologic Age Versus Chronologic Age in ASD: A Prospective Cohort Study

PI: Favian Su, MD
Co-PI: Alexis Dang, MD
Co-PI: Alan Dang, MD
The Regents of the University of California, San Francisco
Effect of Blue and Red Light Phototherapy on Shoulder C. Acnes Colonization
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PI: Vincentius Suhardi, MD
Co-PI: Mathias Bostrom, MD
Co-PI: Xu Yang, MD
Hospital for Special Surgery
Role of Leptin Receptor Cells in Aseptic Loosening Membrane Formation
Funding made possible by MTF Biologics

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Co-PI: Augustus Mazzocca, MD, MS
University of Connecticut Health Center
The Impact of Cellular Senescence on Bursal Connective Tissue Progenitors
Funding made possible by University of Connecticut Endowment

PI: Grace Xiong, MD
Co-PI: Andrew Schoenfeld, MD
Brigham and Women's Hospital, Inc
Quality of Life and Cost of Spinal Epidural Abscesses
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Co-PI: Duretti Fufa, MD
Hospital for Special Surgery
The Impact of Implicit Bias Training on Orthopaedic Surgery Residents
Funding made possible by the J. Robert Gladden Orthopaedic Society

PI: Risa Reid, MD
Co-PI: Gabriella Ode, MD
Carolinas Medical Center
Stereotype Threat Among Orthopaedic Residents
Funding made possible by the J. Robert Gladden Orthopaedic Society

OREF/WOF RESIDENT RESEARCH PROJECT GRANTS

PI: Alejandro Cazzulino, MD
Co-PI: Ishaan Swarup, MD
The Regents of the University of California, San Francisco
Preoperative Patient Expectations in Adolescent Idiopathic Scoliosis
Funding made possible by the Western Orthopaedic Foundation (WOF)

PI: Steven Garcia, MD
Co-PI: Brian Feeley, MD
The Regents of the University of California, San Francisco
Functionally Heterogeneous Human Fibroadipogenic Progenitor Cells
Funding made possible by the Western Orthopaedic Foundation (WOF)

PI: Sarah Stroud, MD
Co-PI: Rosanna Wustrack, MD
The Regents of the University of California, San Francisco
Analysis of Prognostic Factors for Adults with Primary Extremity Sarcomas
Funding made possible by the Western Orthopaedic Foundation (WOF)

REGIONAL NEW INVESTIGATOR AWARDS

EASTERN ORTHOPAEDIC ASSOCIATION

Heather Flynn, MD

Temple University Hospital

Are CT scans Needed for Evaluation of Femoral Gunshot Wounds?

Adam W. Green, MD

University of Massachusetts Medical Center

Outcomes and Patient Satisfaction After TKA Are Not Associated with Implant Manufacturer

Alisina Shahi, MD, PhD

Cooper University Hospital

Synovial Fluid Absolute Neutrophil Count a Promising Marker for Diagnosing Periprosthetic Joint Infection

SOUTHERN ORTHOPAEDIC ASSOCIATION

Brian M. Curtin, MD

OrthoCarolina Hip and Knee Center

Results of I&D for Periprosthetic Knee Infection with Use of Intraosseous Antibiotic

Blaine T. Manning, MD

University of Missouri, Columbia

Physical Therapy on Postoperative Day Zero Following Lumbar Spine Surgery Decreases Length of Stay

Keith G. Whitlock, MD

Duke University

Deltoid Ligament Repair vs. Syndesmotic Fixation for Bimalleolar Equivalent Ankle Fractures

WESTERN ORTHOPAEDIC ASSOCIATION

Loren O. Black, MD, MBA

Oregon Health & Science University

Intramuscular Compartment Pressures Do Not Correlate with Tissue Physiology after Tibia Fracture

Andrew R. Jensen, MD, MBE

University of California, Los Angeles

Anatomic Total Shoulder Arthroplasty for Primary Glenohumeral Osteoarthritis in the Elderly

Vanna Rocchi, DO

Naval Medical Center Portsmouth

PROMIS Assessment in Pediatric Patients with Lower Extremity Deficiency—A Multicenter Study

2021 REGIONAL AND NATIONAL WINNERS

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National Champion

Katherine Gerull, MD

Washington University in St. Louis

Barriers for Medical Students from Non-Stereotypical Identities Considering Orthopedic Surgery Careers: A Qualitative Investigation

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Mark T. Langhans, MD

Hospital for Special Surgery

Genetic Risk Factors of Adhesive Capsulitis are Comparable to Traditional Risk Factors

Lasun Oladeji, MD

University of Missouri-Columbia

Validating the Safety of a Hyperosmolar Saline Irrigation Fluid in Arthroscopic Knee Surgery

Vincentius J. Suhardi, MD, PhD

Hospital for Special Surgery

Leptin Receptor Expressing Skeletal Stem Cells Accumulate and Divert to a Fibrogenic Phenotype in Peri-implant Membrane of Patients with Aseptic Loosening

Rishi Trikha, MD

University of California, Los Angeles

Active Rheumatoid Arthritis in a Mouse Model is not an Independent Risk Factor for Periprosthetic Joint Infection

Presenters' Choice

Alan Shamrock, MD

University of Iowa

ACL Graft Preparation with Vancomycin Has No Effect on Patient-Reported Outcomes, Graft Rupture Rates, and Chondrocyte Viability Following Primary ACL Reconstruction

SOUTHEAST REGION RESIDENT RESEARCH SYMPOSIUM

1ST PLACE AWARD

T. David Luo, MD
Wake Forest School of Medicine
Oral Ascorbic Acid Does Not Reverse Radiation-Induced Bone Loss in a Rat Model of Extremity Soft-Tissue Sarcoma Radiotherapy

SECOND PLACE AWARDS

Luis Felipe Colón, MD
University of Tennessee College of Medicine
Assessing the Risk of Nonunion Associated with the Use of Local Antibiotic Powder in Operatively Treated Tibial Plateau and Pilon Fractures

Alexander J. Volkmar, MD
Vanderbilt University Medical Center
Prevalence of Individual Differences in Tibial Torsion: A CT-Based Study

3RD PLACE AWARDS

Scott Barnett, MD
Louisiana State University – New Orleans
Comparison of Short-leg and Long-leg Casts for the Treatment of Distal Third Tibial Shaft Fractures in Children

Michael Colello, MD
Prisma Health-Upstate
Predicting Pathologic Bone Lesions Using Scout Computed Tomography (CT) Imaging

Daniel E. Goltz, MD
Duke University
A Validated Pre-Operative Risk Prediction Tool for Discharge to Skilled Nursing or Rehabilitation Facility Following Anatomic or Reverse Shoulder Arthroplasty

PRESENTERS' CHOICE

Corinne Cloud, MD
Louisiana State University – New Orleans
Advantages of an Orthopedic Trauma Room for Diaphyseal Femur Fractures

Patrik Suwak, MD
Louisiana State University – New Orleans
Assessing Vertebral Body Rotation in Minimally Invasive Spine Surgery

NORTHEAST REGION RESIDENT RESEARCH SYMPOSIUM

FIRST PLACE AWARD

Vincentius Jeremy Suhardi, MD, PhD
Hospital for Special Surgery
Leptin Receptor Expressing Skeletal Stem Cells Accumulate and Divert to a Fibrogenic Phenotype in Peri-Implant Membrane of Patients with Aseptic Loosening

SECOND PLACE AWARDS

Mark T. Langhans, MD
Hospital for Special Surgery
Genetic Risk Factors of Adhesive Capsulitis are Comparable to Traditional Risk Factors

Samir Sabharwal, MD
Johns Hopkins Hospital
Age is Associated with Hypercoagulability in Musculoskeletal Oncology Patients: Analysis of Thromboelastography-Derived Coagulation Profiles

THIRD PLACE AWARDS

James Jackson Gregory, MD
Dartmouth Hitchcock Medical Center
Surgical Invasiveness Index: A Novel Approach to Risk-Adjustment in Total Hip Arthroplasty

Brian De Palma, MD
University of Maryland
Assessment of Staphylococcal Clinical Isolates from Periprosthetic Joint Infection for Potential Bacteriophage Therapy

David Kugelman, MD
NYU Langone Health
Comparing Articulating Spacers for Periprosthetic Joint Infection After Primary THA: All-Cement vs Real Component Articulating Spacers

PRESENTERS' CHOICE

Samir Sabharwal, MD
Johns Hopkins Hospital
Age is Associated with Hypercoagulability in Musculoskeletal Oncology Patients: Analysis of Thromboelastography-Derived Coagulation Profiles

SOUTHWEST REGION RESIDENT RESEARCH SYMPOSIUM

FIRST PLACE AWARD

Rishi Trikha, MD

University of California, Los Angeles

Active Rheumatoid Arthritis in a Mouse Model is

Not an Independent Risk Factor for Periprosthetic Joint Infection

SECOND PLACE AWARDS

Abhinav Sharma, MD

University of California, Irvine

A Simple Hip Spine Classification for Total Hip Replacement—

Validation and Large Multi-Center Series

Ryan O’Leary, MD

University of California, San Diego

Surgical Planning Using Standard Preoperative Radiographs is

Predictive of Successful Pedicle Screw Placement

THIRD PLACE AWARDS

Ryan Halvorson, MD

University of California, San Francisco

Inter-Observer and Intra-Observer Reliability of Classification Systems for

Radiographic Complications After Radial Head Arthroplasty

Todd Heig, MD

Naval Medical Center, San Diego

Pediatric Knee Arthrocentesis: Does Reactive Synovitis Exist in the Knee?

Brendon Mitchell, MD

University of California, San Diego

Classifying Ischial Tuberosity Avulsion Fractures by

Ossification Stage and Tendon Attachment

Kevin Taniguchi, MD

Naval Medical Center, San Diego

Predicting Fragility Fracture Using Opportunistic Computed Tomography Scans

PRESENTERS’ CHOICE

Ryan O’Leary, MD

University of California, San Diego

Surgical Planning Using Standard Preoperative Radiographs is

Predictive of Successful Pedicle Screw Placement

Kathryn D. Dwight, MD

University of California, San Diego

A Simple and Versatile Test for Elbow Posterolateral Rotatory Instability

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9400 West Higgins Road | Suite 215
Rosemont IL 60018-4975
P (847) 698-9980 | F (847) 698-7806
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