

GRANTS AWARDED

2021

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 Prostheses for Tanzanian Amputees
In Memory of John T. Hocker, MD
Funding made possible by the John T. Hocker Charitable Foundation

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
Hospital for Special Surgery
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
The Regents of the University of California, Los Angeles
Targeting Molecules to the Enthesis via Novel Bisphosphonate Chaperones
Funding made possible by the Ira A. Roschelle Family Foundation

ORS/OREF DISTINGUISHED INVESTIGATOR AWARD

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

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

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

PI: Matthew Booth, MD
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

PI: William Crockatt, MD
Co-PI: William Levine, MD
Columbia University Medical Center
Skill Acquisition in Immersive Virtual Reality vs Cadaver Lab
In Honor of Jack C. Hughston, MD and James R. Andrews, MD
Funded by Michael J. Axe, MD and Jeremie M. Axe, MD

PI: Michael Doran, MD
Co-PI: Joshua Rozell, MD
New York University School of Medicine
Losar Use to Mitigate Arthrofibrosis Following Total Joint Arthroplasty
Funding made possible by The American Arthritis Society

PI: Corey Hamilton, MD
Co-PI: Daniel Del Gaizo, MD
Prisma Health-Midlands
Astaxanthin for Pain, Function, and Inflammation in Knee Osteoarthritis
Funding made possible by The American Arthritis Society

PI: Matthew Kolevar, MD
Co-PI: Jonathan Packer, MD
University of Maryland, Baltimore
Development of a Patient-Specific Cartilage Graft Using MRI and 3D Printing
Funding in Honor of Bernard R. Bach Jr., MD

PI: Olivia O'Reilly, MD
Co-PI: Brendan Patterson, MD, MPH
The University of Iowa
Physical Therapy After Shoulder Arthroplasty: Assessing Telerehabilitation
Funding made possible by Dr. Adam and Julie Harris
in Memory of Eugene Harris, MD

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
Funding Made Possible by Dr. Adam and Julie Harris
in Memory of Eugene Harris, MD

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

PI: Ian Wellington, MD
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
Funding made possible by MTF Biologics

OREF/JRGOS HEALTH ORTHOPAEDIC DISPARITIES RESIDENT RESEARCH PROJECT GRANTS

PI: Lauren Barber, MD
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

NATIONAL RESIDENT RESEARCH SYMPOSIUM

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

TOP SCORING RESIDENTS

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

The Orthopaedic Research and Education Foundation (OREF) is an independent 501(c)(3) non-profit organization committed to improving clinical practice and patient outcomes by funding outstanding research and mentoring new investigators to improve the lives of patients with musculoskeletal conditions.

Since its founding, OREF has provided nearly \$150 million in orthopaedic research grants and awards. Current funding opportunities and a list of awarded grants may be accessed at www.oref.org/grants.



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