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Grants Awarded

• 2019/2020 •

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2019 RECIPIENTS

OREF CAREER DEVELOPMENT GRANT

PI: Paul E. Matuszewski, MD Co-PI: Brian Noehren, PhD University of Kentucky Predictors of Persistent Pain and Performance in Patients with Fractures

OREF PROSPECTIVE CLINICAL RESEARCH AWARD

PI: Thomas Kremen, MD University of California, Los Angeles Biologic Therapy to Prevent Osteoarthritis After ACL Injury

OREF CLINICAL RESEARCH AWARD

L. Andrew Koman, MD Wake Forest University School of Medicine Musculoskeletal Uses of Botulinum Toxins: A 30-Year Translational Journey at Wake Forest School of Medicine

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RESEARCH GRANTS

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OREF/ASES/ROCKWOOD CLINICAL RESEARCH GRANT IN SHOULDER CARE

PI: John G. Horneff III, MD Co-PI: Joseph A. Abboud, MD The Rothman Institute Photodynamic Therapy for C. Acnes Decolonization of the Shoulder Dermis

Funding made possible by the Dr. and Mrs. Charles Rockwood **Family Endowment Fund**

OREF TREATMENT OF KNEE OSTEOARTHRITIS RESEARCH GRANT IN HONOR OF THE KNEE SOCIETY

PI: Nicolas Piuzzi, MD **Cleveland Clinic Foundation** Personalized Outcome Prediction Tool for Total Knee Arthroplastv

Funding made possible by Peter Walker, PhD

OREF PREVENTION OF MUSCULOSKELETAL YOUTH SPORTS INJURIES RESEARCH **GRANT IN HONOR OF JAMES ANDREWS, MD**

PI: Jason Zaremski, MD University of Florida, Gainesville Development of a Protocol to Evaluate Baseball Pitcher's Workload

OREF/STRYKER ROBOTIC-ASSISTED TOTAL HIP REPLACEMENT CLINICAL **RESEARCH GRANT**

PI: Ran Schwarzkopf, MD NYU Langone Medical Center Targeting the Functional Safe-Zone with Robotic-Assisted THA

Funding made possible by Stryker Orthopaedics

OREF TOTAL ANKLE REPLACEMENT RESEARCH GRANT

PI: Constantine Demetracopoulos, MD Co-PI: Timothy M. Wright, MD The Hospital for Special Surgery Mechanics of the Ankle and Adjacent Joints after Total Ankle Replacement

Funding made possible by Wright Medical Technology, Inc.

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

PI: Todd Kelley, MD University of Cincinnati, Adult Reconstruction Division Assessing Effects of EMR on Physician Well-Being Using Smartphone Sensing

Funding made possible in part by DePuy Synthes Companies of Johnson & Johnson

OREF/MTF RESEARCH GRANT

PI: Chathuraka Jayasuriya, PhD Co-PI: Brett Owens, MD Rhode Island Hospital Implementing Allogeneic Stem Cells from Cartilage Graft in Meniscus Repair

Funded by Musculoskeletal Transplant Foundation Biologics

OREF/GOLDBERG ARTHRITIS RESEARCH GRANT

PI: Brian Klatt, MD University of Pittsburgh *Bilateral Knee Kinematics in High and Low-Functioning Patients After TKA*

Funding made possible by the Dr. Victor and Mrs. Harriet Goldberg Endowment Fund

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ABOS/OREF SIMULATION RESEARCH GRANT

PI: James F. Kellam, MD Co-PI: Catherine G. Ambrose, PhD The University of Texas Health Science Center at Houston *Fracture Fixation Training Using a Hybrid Simulator with Data Visualization*

Funded by the American Board of Orthopaedic Surgery

OREF HIP AND KNEE RESEARCH GRANT

In collaboration with the American Association of Hip and Knee Surgeons, The Hip Society and The Knee Society PI: Young-Min Kwon, MD, PhD Co-PI: Marco Laggio, PhD Massachusetts General Hospital The Role of Brain Glial Activation in Persistent Pain Following TKA

Funding made possible by Zimmer Biomet

OREF/GLADDEN ORTHOPAEDIC HEALTH DISPARITIES RESEARCH GRANT

PI: Muyibat Adelani, MD Washington University School of Medicine, St. Louis *Connecting Community Context to Racial Disparities in Joint Replacement*

Funding made possible by the J. Robert Gladden Orthopaedic Society

OREF/OTA TRAUMA GRANT

PI: Prism Schneider, MD, PhD The University of Calgary *Hypercoagulability After Hip Fracture as Determined by Thrombelastography*

With funding provided by the Orthopaedic Trauma Association, DePuy Synthes and Zimmer Biomet

THE TOTAL JOINT REPLACEMENT RESEARCH GRANT IN HONOR OF JORGE O. GALANTE, MD

PI: Thorsten M. Seyler, MD Duke University Medical Center Perioperative Antibiotic Prophylaxis in Patients Undergoing Elective TJA

THE TREATMENT OF KNEE OSTEOARTHRITIS RESEARCH GRANT

PI: Lutul D. Farrow, MD Co-PI: John Elias, PhD Cleveland Clinic Foundation *Characterizing Cartilage Degradation Caused by Patellar Instability*

OREF SOFT TISSUE REPAIR AND REGENERATION SPORTS MEDICINE GRANT IN HONOR OF RUSSELL F. WARREN, MD

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In collaboration with the American Orthopaedic Society for Sports Medicine (AOSSM) PI: Natalie L. Leong, MD

Co-PI: Jia Jang, PhD University of Maryland at Baltimore *Therapeutic Application of Perivascular Stem Cells to Rotator Cuff Repair*

OREF PEDIATRIC RESEARCH GRANT

PI: Todd Milbrandt, MD Co-PI: A. Noelle Larson, MD Mayo Clinic - Rochester *Prospective Study of Vertebral Tethering vs. Fusion for Scoliosis*

OREF/AIRCAST FOUNDATION ORTHOPAEDIC RESEARCH GRANT

PI: John W. Xerogeanes, MD Emory University Are Opioids Needed?

OREF NEW INVESTIGATOR GRANT

PI: Alexander Aleem, MD Co-PI: Muhammad Farooq Rai, PhD Washington University School of Medicine in St. Louis *Understanding the Molecular Biology of Shoulder Joint Degeneration*

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CLINICIAN-SCIENTIST GRANTS

OREF MENTORED CLINICIAN-SCIENTIST GRANT

PI: David Kovacevic, MD Columbia University Medical Center Inflammation of Rotator Cuff Tear and Repair

FRIEDENBERG CLINICIAN-SCIENTIST GRANT

PI: Robin Kamal, MD Stanford University Developing and Testing a Tool for Preference Elicitation in Carpal Tunnel Funded by the Zachary B. and Mrs. Kathleen Friedenberg Endowment Fund

RESIDENT CLINICIAN SCIENTIST TRAINING GRANTS

PI: Kelsey Bonilla, MD University of Pennsylvania Achilles Tendon Response to Varying Degrees of Exercise Intensity

Funding made possible by the Ira A. Roschelle Family Foundation

PI: Jarred Bressner, MD Co-PI: Adam Levin, MD Johns Hopkins University *Topology Optimization of Hip Implants to Reduce Stress Shielding*

Funding made possible by the Ira A. Roschelle Family Foundation

PI: Daniel Buchalter, MD Co-PI: Philipp Leucht, MD, PhD Co-PI: Sanjit R. Konda, MD New York University School of Medicine *GIK in Preventing Musculoskeletal Injury After Trauma*

Funding made possible by Thomas P. Sculco, MD

PI: Connor Delman, MD Co-PI: Maury L. Hull, PhD The Regents University of California, Davis *Analysis of Tibial Contact in Kinematically Aligned TKA in Three Implants*

Recipients of an MTF/Charles H. Herndon Resident Clinician Scientist Training Grant

Funding made possible by Musculoskeletal Transplant Foundation Biologics

PI: Ryan C. Rauck, MD Co-PI: Lawrence B. Gulotta, MD Co-PI: Samuel Taylor, MD The Hospital for Special Surgery *The Role of the Long Head of the Biceps Tendon in Shoulder Stabilization*

Recipients of an MTF/Charles H. Herndon Resident Clinician Scientist Training Grant

Funding made possible by Musculoskeletal Transplant Foundation Biologics

PI: Andrew Zogby, MD Co-PI: Samuel Ward, MD University of California, San Diego *A Novel Treatment Strategy for Chronic Rotator Cuff Tears*

In Memory of John T. Hocker, MD

Funding made possible by the John T. Hocker Charitable Foundation

RESIDENT RESEARCH PROJECT GRANTS

OREF RESIDENT RESEARCH PROJECT GRANTS

PI: Daniel Bohl, MD Co-PI: Kamran Hamid, MD Rush University Medical Center *RCT of Dilute Betadine Soak and Scrub for Foot and Ankle Surgery*

PI: Kathleen Keely Boyle, MD Co-PI: Thomas Duquin, MD The Research Foundation for The SUNY on behalf of University at Buffalo *Blue Light Reduces Cutibacterium (Propionibacterium) Acnes Bacterial Burden*

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

PI: Peter Chang, MD Co-PI: David Brogan, MD Washington University in St. Louis In Vivo Analysis of 3D Printed Peripheral Nerve Conduits

PI: Danielle Chun, MD Co-PI: Erin Hsu, MD Northwestern University A Multimodal Nanofiber Scaffold to Improve Bone Healing in Smokers

PI: Guang-Ting Cong, MD Co-PI: Matthew Cunningham, MD, PhD The Hospital for Special Surgery *Nutritional Sustenance and Waste Scavenging in Bone Grafting*

Funding made possible by R. Michael Meneghini, MD

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PI: Ryan Cox, MD Co-PI: Daniel Davis, MD Thomas Jefferson University, Rothman Institute *Hypertonic Saline and Postoperative Pain After Rotator Cuff Repair*

Funding made possible by Dr. Adam and Julie Harris in memory of Eugene Harris, MD

PI: Dana Cruz, MD Co-PI: Eric Gokcen, MD Temple University of the Commonwealth System of Higher Education *A Simple Test to Determine Ability to Drive After RLE Surgery*

Funding provided in part by Conformis, Inc.

PI: Michael Davies, MD CO-PI: Brian Feeley, MD University of California, San Francisco *Characterizing Human FAPs to Decrease Fatty Infiltration of Rotator Cuff*

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: Clayton Del Prince, MD Co-PI: Melissa Kluczynski, MS, BS Co-PI: Leslie Bisson, MD The Research Foundation for The SUNY on behalf of University at Buffalo Impact of Standardized Opiate Prescribing on Number of Pills Prescribed

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PI: Gregory F. Elia, MD Co-PI: Arnold-Peter Weiss, MD Rhode Island Hospital *Initial Metacarpal Stability Following Thumb Carpometacarpal Arthroplasty*

PI: Neill Li, MD Co-PI: Chathuraka Jayasuriya, PhD Rhode Island Hospital Promoting Cartilage Regeneration Through DLX5 Modification of CPCs

PI: Michelle Mo, MD Co-PI: Scott Luhmann, MD Washington University in St. Louis School of Medicine *The Use of Biomarkers in Pediatric Musculoskeletal Infections*

PI: Jeffrey Olson, MD Co-PI: Edward Rodriguez, MD Beth Israel Deaconess Medical Center-Orthopaedics *Biomechanical Testing of Proximal Humerus Fixation: A Novel Approach*

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

PI: Andrew Schneider, MD Co-PI: John Callaci, PhD Loyola University Chicago, Health Sciences Division *Biomechanical and Histologic Effects of Ethanol on Rat Rotator Cuff Repair* ()

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

PI: Michael Stevens, MD Co-PI: Brandon Collofello, MD Co-PI: Vince Prusick, MD University of Kentucky Research Foundation *The Role of Blade Wear and Cure Time in the Prevention of Cast Saw Injuries*

OREF/AIRCAST FOUNDATION RESIDENT RESEARCH PROJECT GRANTS

PI: Matthew Christie, MD Co-PI: Elie Ghanem, MD The University of Alabama at Birmingham *Biofilm Growth on Cerclage Materials: Are Nonmetallic Polymers Superior?*

PI: Christina Hajewski, MD Co-PI: John E. Femino, MD University of Iowa *The Utility of Deltoid Ligament Reconstruction in Syndesmotic Injuries*

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PI: Ian Hutchinson, MD Co-PI: Joseph Zimmerman, MD Albany Medical College *Preoperative Phototherapy with Benzyl Peroxide to Decrease P Acnes Burden*

PI: Alexander E. Loeb, MD Co-PI: Paul Khanuja, MD Johns Hopkins University Enhanced Recovery After Surgery Program for Geriatric Fragility Fractures

PI: Ayoosh Pareek, MD Co-PI: Christopher Camp, MD Mayo Clinic Baseball Statistics for Assessing Return to Play in Pitchers

PI: Heather Roberts, MD The Regents of the University of California, San Francisco Epidemiology, Outcomes and Cost of Revision Total Hip and Knee Arthroplasty

OREF/EXACTECH RESIDENT RESEARCH PROJECT GRANTS

PI: Keith Aziz, MD Co-PI: Aviram Giladi, MD Co-PI: Kenneth Means, MD MedStar Health Research Institute *The Effect of Skin Pigmentation on Evaluation of Distal Limb Ischemia*

PI: Matthew Counihan, MD The Trustees of the University of Pennsylvania *Limited Scar Resection for Chronic Achilles Repair: Use of a Rat Model*

PI: Lynn Ann Forrester, MD Co-PI: Stavros Thomopoulos, PhD Columbia University Medical Center *Early Osteoarthritis After Neonatal Brachial Plexus Palsy*

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PI: Christopher Kowalski, MD Co-PI: Hyun-Min Kim, MD Pennsylvania State University College of Medicine Shoulder Immobilization Following Reverse Total Shoulder Arthroplasty

PI: Peter Shaughnessy, MD Co-PI: John-Erik Bell, MD Dartmouth-Hitchcock Clinic *Off Axis Loading and Articulation in the Loosening of Cemented Glenoids*

OREF/JRGOS ORTHOPAEDIC DISPARITIES RESIDENT RESEARCH PROJECT GRANTS

PI: Blake Montgomery, MD Co-PI: Kali Rose Tileston, MD Stanford University *Healthcare Disparities in Pediatric Fracture Care*

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Funding made possible by the J. Robert Gladden Orthopaedic Society

PI: Asa West Shanekel, MD Co-PI: C. Lowry Barnes, MD University of Arkansas for Medical Sciences Addressing Disparities in Total Knee Arthroplasty Through Patient Education

Funding made possible by the J. Robert Gladden Orthopaedic Society

OREF/WOF RESIDENT RESEARCH PROJECT GRANTS

PI: David Falgout, MD Arizona Board of Regents, University of Arizona *Recovery from Ciprofloxacin Induced Tendinopathy*

PI: Peter Hsiue, MD Co-PI: Nicholas Bernthal, MD Co-PI: Michael Yeaman, PhD The Regents of the University of California, Los Angeles *Macrophage Priming and Adoptive Transfers in Orthopaedic Implant Infections*

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PI: Chad Ishmael, MD Co-PI: Nicholas Bernthal, MD The Regents of the University of California, Los Angeles *The Promise of Photodynamic Therapy (PDT) for Implant Infection*

OREF/CURRENT CONCEPTS IN JOINT REPLACEMENT CLINICAL PRACTICE AWARDS

Spring Award

Christopher Dy, MD Washington University in St. Louis *Two State Comparison of Total Joint Arthroplasty After Medicaid Expansion*

Funding made possible by A. Seth Greenwald, D.Phil(Oxon)

Winter Award

Cindy Nahhas, BS Rush University Medical Center Randomized Trial of Static and Articulating Spacers for The Infected TKA

Funding made possible by A. Seth Greenwald, D.Phil(Oxon)

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ORS/OREF DISTINGUISHED INVESTIGATOR AWARD

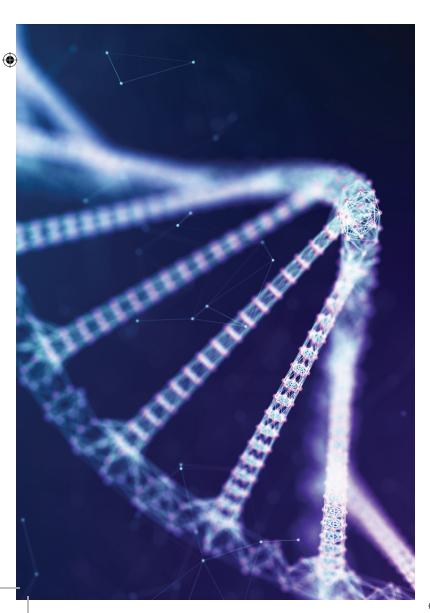
Alan Grodzinsky, PhD Massachusetts Institute of Technology (MIT) Biological Engineering

OREF/INTERNATIONAL SOCIETY OF ORTHPAEDIC SURGERY AND TRAUMATOLOGY TRAVEL AWARDS

HossamElden Abodonia, MD Kafr Eldawar General Hospital Scaphocapitate Fusion for Kienbock's Disease

Lin Cong, MD

The First Affiliated Hospital, China Medical University Minimally Invasive Treatment of Adolescent Idiopathic Scoliosis



REGIONAL NEW INVESTIGATOR AWARDS

EASTERN ORTHOPAEDIC ASSOCIATION

Alex Gu, BS

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George Washington School of Medicine and Health Sciences Operative Time Greater than 120 minutes is Associated with Increased Pulmonary and Thromboembolic Complications Following Revision Total Hip Arthroplasty

Ludovico Lucenti, MD Rothman Orthopedics A Comparison of Screw Placement Utilizing an Antegrade vs a Retrograde Technique for Fixation of Scaphoid Waist Fractures

Mohamed Salar, MD University of Florida Health Jacksonville Infections Associated with Temporary External Fixation

SOUTHERN ORTHOPAEDIC ASSOCIATION

Keith Aziz, MD Johns Hopkins Orthopedics *Missing Data: How it Affects the Identification of Risk Factors for Shoulder Surgery Complications*

Jonathan B. Goodloe, MD Medical University of South Carolina Variability in Opioid Administration After Fixation of Supracondylar Humerus Fractures

Sophia A. Traven, MD Medical University of South Carolina *Elevated BMI Predicts Concurrent Surgical Pathology at the Time of Pediatric ACL*

WESTERN ORTHOPAEDIC ASSOCIATION

Ryland Kagan, MD Oregon Health & Science University *Mean 10-year Survivorship, Patient-Reported Outcomes and Satisfaction of a Fixed-Bearing Unicompartmental Knee Arthroplasty*

Carol Lin, MD, MA Cedars-Sinai Medical Center Implementing a Geriatric Fracture Program in a Pluralistic Environment

Zachary C. Lum, DO University of California, Davis Medical Center *Females and Long Spinal Fusions Result in Total Hip Arthroplasty*

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Grants Awarded 2020 RECIPIENTS As of 3/1/2020

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OREF CLINICAL RESEARCH AWARD

Braden Fleming, PhD Warren Alpert Medical School of Brown University Long-Term Outcomes of ACL Reconstruction Surgery

RESEARCH GRANTS

OREF/ASES/ROCKWOOD CLINICAL RESEARCH GRANT IN SHOULDER CARE

PI: Elizabeth L. Yanik, PhD Co-PI: Jay Keener, MD Washington University in St. Louis Patient Factors Associated with Genetic Markers for Rotator Cuff Disease

Funding made possible by the Dr. & Mrs. Charles Rockwood Family Endowment Fund

OREF/GOLDBERG ARTHRITIS RESEARCH GRANT

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PI: Wayne Moschetti, MD Co-PI: Samuel Kunkel, MD Dartmouth-Hitchcock Medical Center Intraoperative Ketamine for Pain Catastrophizing Arthroplasty Patients

Funding made possible by the Dr. Victor and Mrs. Harriet Goldberg Endowment Fund

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

PI: Derek Amanatullah, MD, PhD Stanford University *Attacking Biofilm-Associated Persister Cells*

OREF/TAF ORTHOPAEDIC RESEARCH GRANT

PI: Peter Apel, MD, PhD Carilion Medical Center Co-PI: Miguel Perez, PhD Virginia Tech Transportation Institute *When Can Patients Safely Drive After Rotator Cuff Repair?*

Funding made possible by The Aircast Foundation

ORS/OREF DISTINGUISHED INVESTIGATOR AWARD

Joshua J. Jacobs, MD Rush University Medical Center

ORS/OREF TRAVEL AWARDS IN ORTHOPAEDIC RESEARCH TRANSLATION

Srikanth Divi, MD Rothman Institute/Thomas Jefferson University Hospital Downregulation of Circulating Mir-155 Predicts Progression of Disc Degeneration and Also Correlates with Increased Leg Pain

William Hambright, PhD

Steadman Philippon Research Institute Acute Fisetin Treatment Attenuates Age-Associated Bone Density Loss in the Zmpste23-/- Progeria Mouse Model

Alexander Lazarides, PhD Duke Univesity Medical Center A Cross-Species Personalized Medicine Pipeline Identifies The CRM1 Export Pathway As a Potentially Novel Treatment for Osteosarcoma

Ichiro Okano, MD Hospital for Special Surgery Early Changes in Bone Mineral Density Measured By QCT After Anterior Cervical Spine Surgery

Rachel Silverstein, MD Westchester Medical Center 5-Year Follow-Up Data for Cementless Total Knee Arthroplasty Patients

Holly Stewart, VMD Colorado State University Evaluation of an Experimental Model of Bone Marrow Lesions Using the Ovine Femoral Condyle

Matthew Vopat, MD University of Kansas Medical Center Return to Sport After Primary Lateral Ligament Repair Versus Suture Tape Augmentation: Meta-Analysis and Systematic Review

OREF GRANT PROGRAM VOLUNTEERS

RESEARCH GRANTS COMMITTEE

Matthew B. Dobbs, MD, *Chair* Nicholas M. Bernthal, MD James D. Heckman, MD Marc C. Hochberg, MD Joshua J. Jacobs, MD Brian Johnstone, PhD Marci D.Jones, MD

PEER REVIEWERS

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Motomi Enomoto-Iwamoto, DDS, PhD

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The Orthopaedic Research and Education Foundation, founded in 1955, is an independent, charitable 501(c)(3) organization committed to improving lives by supporting excellence in orthopaedic research. OREF is dedicated to being the leader in supporting research that improves function, eliminates pain and restores mobility, and is the premier orthopaedic organization funding research across all specialties.

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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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