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1950
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Celebrating 60 years of supporting excellence in orthopaedic research.
OREF RESEARCH GRANTS AND AWARDS FUNDED FOR 2015

CAREER DEVELOPMENT GRANTS

OREF CAREER DEVELOPMENT GRANT
Michael J. Gardner, MD
Washington University
The Effects of Systemic Hedgehog Pathway Modulation on Fracture Healing

OREF/NSCF CAREER DEVELOPMENT GRANT IN STEM CELLS AND REGENERATIVE MEDICINE
Jeffery T. Spang, MD
University of North Carolina at Chapel Hill
Development of a Functional Osteochondral Replacement Graft: 3-D Tissue Engineering and Biomimetic Stem Cell Guidance

OREF PROSPECTIVE CLINICAL RESEARCH GRANT
Ana-Maria Vranceanu, PhD
Massachusetts General Hospital
A Randomized Controlled Trial Testing the Feasibility, Acceptability and Preliminary Effect of the Relaxation Response Cognitive Behavioral (RRCB) Mind Body Intervention Delivered via Videoconferencing Compared to Usual Medical Care, in Patients with Acute Trauma at Risk for Chronic Pain and Disability
Funding made possible by the Mahendra Patel, MD Research Fund

OREF CLINICAL RESEARCH AWARD
Stuart L. Weinstein, MD
University of Iowa
The Evidence Base for the Prognosis and Treatment of Adolescent Idiopathic Scoliosis

RESEARCH GRANTS

OREF/MTF RESEARCH GRANT
Aaron W. James, MD
University of California, Los Angeles
Combining NELL-1 and Sonic Hedgehog Signaling for Improved Bone Regeneration

OREF/GOLDBERG RESEARCH GRANT IN ARTHRITIS
Michael P. Muldoon, MD
Sharp HealthCare Hip Preservation Center
A Prospective Study Comparing Prevalence of Hypermobility in Hip Dysplasia and Arthritis Patient Populations in an Adult Reconstructive Practice
Funding made possible by the Dr. Victor and Mrs. Harriet Goldberg Endowment Fund

OREF/ASES/ROCKWOOD CLINICAL RESEARCH GRANT IN SHOULDER CARE
Vani J. Sabesan, MD
Wayne State University
Biomechanical Assessment of Novel Augmented Glenoid Implants in Total Shoulder Arthroplasty Using Finite Element Analysis
Funding made possible by the Dr. and Mrs. Charles Rockwood Family Endowment Fund

RJOS/OREF/DEPUY RESEARCH GRANT IN WOMEN’S MUSCULOSKELETAL HEALTH
Ashley Levack, MD
Hospital for Special Surgery
The Effect of Intravenous Tranexamic Acid on Blood Loss and Transfusion After Periacetabular Osteotomy: A Prospective, Double-Blinded, Randomized Controlled Trial

POSNA/OREF RESEARCH GRANT IN PEDIATRIC ORTHOPAEDICS
Jonathan J. Rios, PhD
Texas Scottish Rite Hospital for Children
Uncoupling Cell Signaling and Mineralization Defects in Neurofibromin-Deficient Tibial Pseudoarthrosis

OREF/NSCF RESEARCH GRANTS IN STEM CELLS AND REGENERATIVE MEDICINE
Geoffrey S. Baer, MD
University of Wisconsin
Genetically Modified MSCs to Explain Their Anti-Inflammatory Role in Regenerative Tendon Healing

Brian T. Feeley, MD
University of California, San Francisco
Defining the Role of Fibro/Adipocyte Precursor (FAP) Cells in Rotator Cuff Muscle Fatty Infiltration and Fibrosis
OREF PREVENTION OF MUSCULOSKELETAL YOUTH SPORTS INJURIES GRANT
James R. Slauterbeck, MD
University of Vermont
Will FIFA 11+, An Injury Prevention Program, Decrease Lower Extremity Injuries in High School Athletics?

HHMI-OREF MEDICAL RESEARCH FELLOW GRANT
Soyun Michelle Hwang
Mayo Clinic College of Medicine
PHLPP Inhibition and Osteoarthritis Disease Progression

ORS/OREF POSTDOCTORAL FELLOWSHIP GRANT
Ryan D. Ross, PhD
Rush University Medical Center
Measuring Circulating Biomarkers to Diagnose Osteolysis Prior to Radiographic Loosening

NEW INVESTIGATOR GRANTS
Ljiljana Bogunovic, MD
Washington University
The Safety of Antithrombotic Medications in Patients Undergoing Arthroscopic Surgery of the Knee
Funding made possible by Arthrex

Albert O. Gee, MD
University of Washington
Nano-Engineered Hybrid Scaffolds for Cartilage Tissue Regeneration
Funding made possible by Arthrex

Laurence B. Kempton, MD
Indiana University
Maximizing Value of Orthopaedic Trauma Care Through Surgeon-Based Cost Analysis Education
Funding made possible by Zimmer Holdings Inc.

Thomas J. Kremen, MD
Cedars-Sinai Medical Center
The Effect of Hamstring Tendon Autograft Harvest on the Restoration of Knee Stability in the Setting of Anterior Cruciate Ligament Rupture and Concurrent Medial Collateral Ligament Injury
Funding made possible by Arthrex

Miltiadis H. Zgonis, MD
University of Pennsylvania
Strain Transfer in the Knee Meniscus: Novel Mechanisms to Guide Treatment and Inform Tissue Engineering Strategies
Funding made possible by Arthrex

RESIDENT CLINICIAN SCIENTIST TRAINING GRANTS
David L. Bernholt, MD
Washington University
Implementation of a Thromboelastography-Guided Transfusion Protocol in Pediatric Neuromuscular Scoliosis Surgery

Funding made possible by the Dr. Dane and Mrs. Mary Louise Miller Endowment Fund

Christopher D. Collier, MD
Case Western Reserve University
Opportunities for Drug Repurposing in Osteosarcoma: A Screen of FDA-Approved Oncology Drugs in Micrometastatic Models of Disease

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

Debbie Yen-Dao Dang, MD, PhD
University of California, San Francisco
Interactions Between Cadherin 11 and β-Catenin During Fracture Healing
Recipient of an MTF/Charles H. Herndon Resident Clinician Scientist Training Grant

Funding made possible by the Musculoskeletal Transplant Foundation

Kyle R. Duchman, MD
University of Iowa
The Effects of Recombinant Human Parathyroid Hormone (rhPTH) Treatment Duration on Tendon-to-Bone Healing in a Rat Rotator Cuff Repair Model

Funding made possible by the Ira A. Roschelle Family Foundation

Cody D. Hillin, MD
University of Pennsylvania
Immobilization Angle Effect on Tendon Healing in Achilles Tendon Rupture
Funding made possible by the Dr. Dane and Mrs. Mary Louise Miller Endowment Fund

Adam S. Olsen, MD
University of Pittsburgh
Intervertebral Disc Degeneration: Treatment with a Novel, Photopolymerizable Scaffold Seeded with Mesenchymal Stem Cells
Funding made possible by the Ira A. Roschelle Family Foundation

Austin J. Ramme, MD, PhD
NYU Hospital for Joint Diseases
Subchondral Bone Microdamage: A New Therapeutic Target for PTOA Prevention Following ACL Injury
Recipient of an MTF/Charles H. Herndon Resident Clinician Scientist Training Grant

Funding made possible by the Musculoskeletal Transplant Foundation

Rajin Shahriar, MD
Wayne State University
A Novel Application of DepoFoam Bupivacaine for Post-Operative Pain Management in Shoulder Arthroplasty
Funding made possible by Thomas P. Sculco, MD
OREF/DEPUY RESIDENT RESEARCH PROJECT GRANTS

Hassan J. Azimi, MD
University of California, San Diego
Mechanical and Structural Properties and Gene Expression Patterns in Full Thickness Rotator Cuff Tears: A Study of Diabetic Versus Non-Diabetic Patients

Shannon E. Cassel, MD
University of Iowa
Randomized Control Study Examining the Long-Term Effectiveness of Trigger Finger Injections with Triamcinolone vs. Dexamethasone

Vahid Entezari, MD
Cleveland Clinic
The Effect of Autograft Bone Augmentation of Center Peg on Early Radiographic Lucency Around Glenoid Component After Anatomical Shoulder Arthroplasty in Patients with Glenohumeral Osteoarthritis

Andrew E. Hanselman, MD
West Virginia University
Post-Traumatic Immunosuppression in Open Fractures and Supplementation with IL-12 Therapy

Brandon P. Hirsch, MD
University of Miami
Biomechanical Evaluation of Anterior Fixation Devices Designed for Lateral Access in the Treatment of Thoracolumbar Fractures

Jason R. Kang, MD
Stanford University Hospital and Clinics
The Effects of Varenicline (Chantix®) on Lumbar Spinal Fusion in a Rat Model

Christopher G. Langhammer, MD, PhD
University of California, San Francisco
Validation of a Low-Cost High-Fidelity Bench Model for Studying Surgical Skill Acquisition in Orthopaedic Surgery Residents

Ishaan Swarup, MD
Hospital for Special Surgery
The Effect of Intravenous e-Aminocaproic Acid on Blood Loss and Transfusion Requirements After Bilateral Varus Rotational Osteotomy (VRO): A Prospective, Double-Blinded, Randomized Controlled Trial

Shaleen N. Vira, MD
NYU Hospital for Joint Diseases
Analysis of Muscle Geometry and Fat Infiltration in Adult Spinal Deformity Patients

Caroline N. Wolfe, MD
University of Michigan
Targeted Inhibition of Myostatin to Prevent Muscle Atrophy After ACL Tear

OREF RESIDENT RESEARCH PROJECT GRANT

Benjamin S. Assenmacher, MD
Northwestern University
Evaluation of Recombinant CXCL12 Isoforms as Biologics for Spinal Arthrodesis

Funding provided by gifts made in memory of Harry N. Herkowitz, MD

OREF/ORS RESIDENT RESEARCH PROJECT GRANT

Stephanie A. Russo, MD, PhD
University of Pittsburgh
Therapeutic Taping for Scapular Winging: Efficacy of Different Approaches in Children with Brachial Plexus Birth Palsy

OREF/EXACTECH RESIDENT RESEARCH PROJECT GRANTS

Timothy T-W. Cheng, MD
University of California, San Diego
Evaluation of Gene Expression and Signaling Pathways in Patients with Massive Rotator Cuff Tears in Response to Mechanical Stimuli

Craig R. Louer, MD
Washington University
Biomechanical Comparison of Sacroiliac Reconstruction Constructs Following Sarcoma Resection

Emily J. M. Monroe, MD
Northwestern University
Effect of Intrawound Vancomycin on Propionibacterium Acnes Eradication in a Rat Shoulder Model

Jeremy D. Shaw, MD
University of California, San Francisco
Methylene Blue Guided Debridement in Periprosthetic Joint Infection

Morgan M. Swanstrom, MD
Hospital for Special Surgery
Evidence of Scaphoid Avascular Necrosis on MR: Correlation with Histology

OREF/TAF RESIDENT RESEARCH PROJECT GRANTS

Harpreet S. Bawa, MD
University of Chicago
Growth Factor Expression During Tendon Healing in Three Tendon Types

Funding provided by the Aircast Foundation

Mark J. Gage, MD
NYU Hospital for Joint Diseases
Which Surgical Treatment Method of Femoral Neck Fractures Allows for More Rapid Return to Function? A Study Using a Novel Method to Monitor Postoperative Activity

Funding provided by the Aircast Foundation
OREF/TAF RESIDENT RESEARCH PROJECT GRANTS (continued)

Amit Jain, MD
Johns Hopkins University School of Medicine
Duration of Antibiotic Prophylaxis in Orthopaedic Trauma: What is the Standard of Care?
Funding provided by the Aircast Foundation

Daniel Koehler, MD
University of Iowa Hospitals and Clinics
Time-Driven Activity-Based Cost Analysis of Open vs. Endoscopic Carpel Tunnel Release
Funding provided by the Aircast Foundation

Manish Noticewala, MD
Columbia University Medical Center
Pain, Function, and Performance Assessment in the Overhead Youth Athlete
Funding provided by the Aircast Foundation

Brent G. Witten, MD
West Virginia University Research Corporation
Outpatient Compliance with Portable Pneumatic Compression Device
Funding provided by the Aircast Foundation

REGIONAL NEW INVESTIGATOR AWARDS
Eastern Orthopaedic Association
Southern Orthopaedic Association
Western Orthopaedic Association

ORS/OREF DISTINGUISHED INVESTIGATOR AWARD
Adele Boskey, PhD
Hospital for Special Surgery

ORS/OREF TRAVEL AWARDS IN ORTHOPAEDIC RESEARCH TRANSLATION
Mohammad M. Alzahrani, MMBs, MSc
McGill University

Mathew J. Failla, PT, MSPT, SCS
University of Delaware

Natalie L. Leong, MD
University of California, Los Angeles

Iain R. Murray, MBChB, PhD
University of Edinburgh, United Kingdom

Alvin W. Su, MD, PhD
Mayo Clinic

ORS/OREF/CCJR CLINICAL PRACTICE AWARDS
William C. Schroer, MD (Spring Award)
St. Louis Joint Replacement Institute
Total Hip Arthroplasty Outcomes Correlate Strongly with Spine Disability

Carlos A. Higuera, MD (Winter Award)
Cleveland Clinic
Chronic Suppression with Oral Antibiotics Increases Infection-Free Survivorship in Periprosthetic Joint Infections

MISCELLANEOUS GRANTS
AAOS/OREF/ORS Clinician Scholar Development Program
ORS/OREF Orthopaedic Basic Science Course
ORS/OREF/AAOS New Investigator Grant Writing Workshop

OREF 2015 RESIDENT RESEARCH SYMPOSIA
Symposia held at:
California Orthopaedic Association Annual Meeting
Florida Orthopaedic Society Annual Meeting
University of Chicago
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