

Penn Center for Musculoskeletal Disorders (PCMD) sponsored
Orthopaedic Research Club Seminar

Orthopaedic Research Club Seminar Series – 2025

Wednesday, December 3, 2025, 12:00pm-1:00pm

Title: “Role and therapeutic potential of Proteoglycan 4 (PRG4, lubricin) in musculoskeletal health”

Tannin Schmidt, PhD, Associate Professor of Biomedical Engineering, School of Dental Medicine, University of Connecticut Health Center

Wednesday, October 22, 2025, 12:00pm-1:00pm - Special Trainee Session

*Title: “Surgical revision of *S. aureus* infection increases virulence factor expression and activates a multi-tissue inflammatory response”*

Carly Smith, Grad Student from Department of Orthopaedic Surgery, Thomas Jefferson University

Title: “INPP5E: Key Negative Regulator on Osteoclast Differentiation and Bone Loss”

Abdulaziz Hakeem, Grad Student from Department of Basic & Translational Science, School of Dental Medicine, University of Pennsylvania

Wednesday, October 8, 2025, 3:00pm-4:00pm - ORC Special Seminar

Title: “New developments in our understanding and management of denosumab withdrawal rebound bone loss”

Michelle McDonald, PhD, Associate Professor from the University of Sydney

Wednesday, August 6, 2025, 12:00pm-1:00pm

Title: “Unraveling the Role of the Meniscus in Preclinical Aging Models of OA”

Mona Dvir-Ginzberg, PhD, Associate Professor, Institute for Biomedical and Oral Research, Faculty of Dental Medicine, Hebrew University of Jerusalem

Wednesday, June 25, 2025, 12:00pm-1:00pm

Title: “Spine and Punishment: Spinal Pathology and Immune Cell Recruitment in Alpha-1 Anti-trypsin Deficiency”

Nilsson Holguin, PhD, Assistant Professor of Orthopedics, Cell, Developmental & Regenerative Biology, Icahn School of Medicine at Mount Sinai

Wednesday, May 21, 2025, 12:00pm-1:00pm

Title: “Parent-Powered Propulsion: Biomechanical Effects of Running with an Infant Stroller”

Allison Altman Singles, PhD, Associate Professor of Kinesiology & Mechanical Engineering, Penn State Berks

Wednesday, April 23, 2025, 12:00pm-1:00pm

Title: “Using Digit Tip Regeneration to Inform Regenerative Engineering of Complex Musculoskeletal Tissues”

Sylvia Qu, PhD, Assistant Professor of Orthopaedic Surgery & Sports Medicine and Mechanical Engineering, University of Washington

Wednesday, February 19, 2025, 12:00pm-1:00pm

Title: “Advancing Mesenchymal Stromal Cell Therapies for Musculoskeletal Repair through the Integration of CRISPR, Deep Learning, and Biomaterials Engineering”

Tomas Gonzalez-Fernandez, PhD, Assistant Professor of Bioengineering, Lehigh University

Wednesday, January 22, 2025, 12:00pm-1:00pm

Title: “Leveraging Technology to Optimize Surgical Readiness: The ORTeLLigence Solution”

Derek Donegan, MD, Associate Professor of Orthopaedic Surgery, University of Pennsylvania

Orthopaedic Research Club Seminar Series – 2024

Wednesday, December 4, 2024, 12:00pm-1:00pm

Title: “Stable vs. Dynamic Integrin Forces Regulate Fibrotic Cellular Behaviors”

Tristan Driscoll, PhD, Assistant Professor of Chemical and Biomedical Engineering, Florida State University

Wednesday, October 23, 2024, 12:00pm-1:00pm

Title: “Discovery of stem cells in the calvarium and articular cartilage”

Seoyeon Bak, PhD, Instructor of Pathology and Laboratory Medicine, Weill Cornell Medical College

Wednesday, September 25, 2024, 12:00pm-1:00pm - Special Trainee Session

Title: “Type V Collagen Orchestrates the Initial Matrix Templating in Developing Articular Cartilage and Meniscus”

Bryan Kwok, PhD, Postdoctoral Researcher from School of Biomedical Engineering, Science and Health Systems, Drexel University

Title: “An Adipo-Osteo Progenitor Contributes to Bone and Marrow Fat Formation in Adult Mice”

Jasmin Koehnken Sawall, PhD, Postdoctoral Researcher from Department of Surgery, Children's Hospital of Philadelphia

Wednesday, July 31, 2024, 12:00pm-1:00pm

Title: “Update on Premenopausal Idiopathic Osteoporosis: Evaluation and Management”

Adi Cohen, MD, MHS, Professor of Medicine and Director of Early Onset Osteoporosis Center, Columbia University

Wednesday, June 26, 2024, 12:00pm-1:00pm

Title: “The potential therapeutic use of cannabinoids in fracture healing”

Reyad Elbarbary, PhD, Associate Professor of Orthopaedics and Rehabilitation, Biochemistry and Molecular Biology, Penn State University

Wednesday, May 22, 2024, 12:00pm-1:00pm

Title: “Injectable Hydrogels for Biomedical Applications”

Sebastian Vega, PhD, Assistant Professor of Biomedical Engineering and Orthopaedic Surgery, Rowan University

Wednesday, April 24, 2024, 12:00pm-1:00pm

Title: “Bridging the Gap: Understanding Local Tissue Crosstalk in the Rotator Cuff”

Brianne Connizzo, PhD, Assistant Professor of Biomedical Engineering and Mechanical Engineering, Boston University

Wednesday, March 27, 2024, 12:00pm-1:00pm

Title: “Sirtuin 6 (SIRT6) as a potential therapeutic for osteoarthritis”

John Collins, PhD, Assistant Professor of Orthopaedic Surgery, Sidney Kimmel Medical College, Thomas Jefferson University

Wednesday, February 28, 2024, 12:00pm-1:00pm

Title: “Spatially controlling biomaterial properties to direct osteochondral tissue formation”

Lesley Chow, PhD, Associate Professor of Materials Science and Engineering & Bioengineering, Lehigh University

Wednesday, January 24, 2024, 12:00pm-1:00pm

Title: “Regulation of adipose tissue remodeling and fibrosis responses”

Patrick Seale, PhD, Professor of Cell & Developmental Biology, Institute for Diabetes, Obesity & Metabolism, University of Pennsylvania

Orthopaedic Research Club Seminar Series – 2023

Wednesday, December 6, 2023, 12:00pm-1:00pm

Title: “Regulation of adipose tissue remodeling and fibrosis responses”

Patrick Seale, PhD, Professor of Cell & Developmental Biology, Institute for Diabetes, Obesity & Metabolism, University of Pennsylvania

Wednesday, October 25, 2023, 12:00pm-1:00pm

Title: "Endogenous small molecule mineralization regulators: differential effects on bone and soft connective tissues?"

Koen Van De Wetering, DVM, PhD, Assistant Professor of Orthopaedic Surgery, Thomas Jefferson University

Wednesday, September 27, 2023, 12:00pm-1:00pm – Special Trainee Seminar

Title: "The Role of Regulator of G Protein Signaling 12 (RGS12) in Inflammatory Arthritis"

Gongsheng Yuan, PhD, Postdoctoral Researcher

Title: "In vivo Validation of a Continuous Gradient Porous Scaffold for Osteochondral Defect Repair in a Rabbit Model"

Kyra Smith, PhD Student

Wednesday, June 28, 2023, 12:00pm-1:00pm

Title: "Mechanical Regulation of Monocyte Fate in Fibrotic Niches"

Kyle Vining, PhD, Assistant Professor, Preventive and Restorative Sciences, Penn Dental Medicine, and Materials Science and Engineering, Penn Engineering

Wednesday, May 24, 2023, 12:00pm-1:00pm

Title: Regulating GPCR Signaling in Cartilage Development and Disease

Fadia Kamal, PharmD, MSc, PhD

Assistant Professor, Department of Orthopedics and Rehabilitation and Pharmacology
Penn State University, College of Medicine

Wednesday, April 26, 2023, 12:00pm-1:00pm, Virtual

Title: "PTH and PTHrP Analog: Actions on Bone Biomarkers"

Bin Wang, PhD, Associate Professor, Department of Medicine, Thomas Jefferson University Medical College

Wednesday, March 22, 2023, 12:00pm-1:00pm, Virtual

Title: "Synovial Fibroblasts: Their Roles in Joint Health and Disease"

Pallavi Bhattaram, PhD, Assistant Professor, Department of Orthopaedics
Emory University School of Medicine

Wednesday, February 22, 2023, 12:00pm-1:00pm, Virtual

Title: Bioelectricity for Cartilage Drug Delivery and Imaging

Ambika Goel Bajpayee, PhD, Associate Professor of Bioengineering, Northeastern University

Wednesday, January 25, 2023, 12:00pm-1:00pm, Virtual

Title: Novel Strategies to Prevent Radiation-Induced Bone Loss

Colleen Wu, PhD, Assistant Professor of Orthopaedic Surgery, Pharmacology and Cancer Biology, and Cell Biology, Duke University School of Medicine

Orthopaedic Research Club Seminar Series – 2022

Wednesday, December 7, 2022, 12:00pm-1:00pm, Virtual

Title: "The Impact of Aging on Joint Homeostasis: Inflammation and Cell Death as Mediators of Cartilage Degeneration"

Jennifer Jonason, PhD, Associate Professor, Department of Orthopaedics & Rehabilitation, University of Rochester Medical Center

Wednesday, October 26, 2022, 12:00pm-1:00pm, Virtual

Title: "Emerging Applications of the Miniature Joint System in Studying Osteoarthritis and Developing Treatments"

Hang Lin, PhD, Assistant Professor, Department of Orthopaedic Surgery & Bioengineering

University of Pittsburgh

Wednesday, September 28, 2022, 12:00pm-1:00pm, Virtual Meeting – Special Trainee Seminar

Title: “Synovial joint cavitation initiates with microcavities in interzone and is coupled to skeletal flexion and elongation in developing mouse embryo limbs”

Minwook Kim, Ph.D., Postdoctoral Researcher, Division of Orthopaedic Surgery, CHOP

Title: Mandibular condyle contains a unique chondrocyte progenitor population to maintain mandibular bone homeostasis

Xiaobin Huang, Ph.D., Postdoctoral Researcher, Department of Oral and Maxillofacial Surgery, School of Dental Medicine, University of Pennsylvania

Wednesday, August 17, 2022, 12:00pm-1:00pm, Virtual Meeting

Title: “Managing Fibrodysplasia Ossificans Progressiva (FOP): Therapeutic Advances”

Mona Al Mukaddam, MD, Associate Professor of Medicine, University of Pennsylvania

Wednesday, June 29, 2022, 12:00pm-1:00pm, Virtual Meeting

Title: “Probing site-specific nanoscale mechanics of mineralized tissue”

Ottman Tertuliano, Ph.D., Assistant Professor of Mechanical Engineering and Applied Mechanics, University of Pennsylvania

Wednesday, May 25, 2022, 12:00pm-1:00pm, Virtual Meeting

Title: “Extracellular regulation of Wnt signaling by ADAMTS-like 2 in skeletal muscle”

Dirk Hubmacher, Ph.D., Assistant Professor of Orthopaedics, Icahn School of Medicine at Mount Sinai

Wednesday, April 27, 2022, 12:00pm-1:00pm, Virtual Meeting

Title: “Stem Cell Heterogeneity and Specific Regulation For Bone and Tendon Regeneration”

Dongsu Park, Ph.D., Assistant Professor of Molecular and Human Genetics, Baylor College of Medicine

Wednesday, March 23, 2022, 12:00pm-1:00pm, Virtual Meeting

Title: “Using cell and gene-based therapies to prevent posttraumatic osteoarthritis”

Kyla Ortved, DVM, Ph.D., DACVS, DACVSMR, Jacques Jenny Endowed Term Chair of Orthopedic Surgery, Department of Clinical Studies-New Bolton Center, University of Pennsylvania

Wednesday, February 23, 2022, 12:00pm-1:00pm, Virtual Meeting

Title: “Macrophages in Bone Remodeling”

Elizabeth Bradley, Ph.D., Assistant Professor of Orthopaedics, University of Minnesota

Wednesday, January 26, 2022, 12:00pm-1:00pm, Virtual Meeting

Title: “Multifaceted Roles of Piezo Mechanosensitive Channels in Chondrocytes.”

Whasil Lee, Ph.D., Assistant Professor of Biomedical Engineering, University of Rochester Medical Center

Orthopaedic Research Club Seminar Series – 2021

Wednesday, December 8, 2021, 12:00pm-1:00pm, Virtual Meeting

Title: “Engineering Nanoparticles for the Treatment of Osteoarthritis”

Zhiliang Cheng, Ph.D., Associate Professor of Bioengineering, University of Pennsylvania

Wednesday, October 27, 2021, 12:00pm-1:00pm, Virtual Meeting

Title: “Inflammation in the Degeneration and Repair of the Intervertebral Disc”

Nadeen O. Chahine, Ph.D., Associate Professor of Biomedical Engineering (in Orthopedic Surgery); Associate Director of Carroll Laboratories for Orthopedic Surgery, Columbia University

Wednesday, September 22, 2021, 12:00pm-1:00pm, Virtual Meeting - Special Trainee Session

Title: “Fatty acid metabolism in osteoclasts.”

Chao Song, Ph.D., Postdoctoral Fellow, Division of Orthopaedic Surgery, CHOP

Title: "Indispensable roles of type V collagen in regulating TMJ condylar cartilage matrix growth and remodeling."
Prashant Chandrasekaran, Ph.D., Research Associate, Division of Cardiology, CHOP

Wednesday, July 27, 2021, 12:00pm-1:00pm, Virtual Meeting

Title: "Hox Genes and Skeletal Stem Cell Maintenance."

Philipp Leucht, MD, FAOA, Associate Professor, Director of Orthopedic Research, Director of the NYU Regenerative Medicine Program, Departments of Orthopedic Surgery and Cell Biology, NYU Langone Health

Wednesday, June 23, 2021, 12:00pm-1:00pm, Virtual Meeting

Title: "Reversing Accumulation of Tendon Damage and Enhancing Healing of Ruptured Tendons."

Nelly Andarawis-Puri, Ph.D., Clare Boothe Luce Associate Professor, Associate Director of Graduate Programs Director of Graduate Studies for Mechanical Engineering, Sibley School of Mechanical and Aerospace Engineering Cornell University

Wednesday, May 26, 2021, 12:00pm-1:00pm, Virtual Meeting

Title: "Two strategies to cure (treat) one rare bone disease: Can we be unbreakable?"

Benjamin Sinder, Ph.D., Lab Director, Wyss/Campbell Center for Thoracic Insufficiency Syndrome, Department of Orthopaedics, Children's Hospital of Philadelphia

Wednesday, April 28, 2021, 12:00pm-1:00pm, Virtual Meeting

Title: "The Role of Cellular Mechanotransduction in Late Tendon Development"

Spencer Szczesny, Ph.D., Assistant Professor of Biomedical Engineering, Orthopaedics & Rehabilitation, Pennsylvania State University

Wednesday, March 24, 2021, 12:00pm-1:00pm, Virtual Meeting

Title: "Intervertebral Disc Degeneration and Regeneration: A Motion Segment Perspective"

Sarah Gullbrand, Ph.D., Director of Shared Research Equipment Core, Corporal Michael J. Crescenz VA Medical Center, Research Assistant Professor of Orthopaedic Surgery, University of Pennsylvania

Wednesday, February 24, 2021, 12:00pm-1:00pm, Virtual Meeting

Title: "Gene- and Cell-Activated Biomaterial Scaffold for Bone Tissue Engineering"

Bing Wang, Ph.D., Associate Professor of Orthopaedic Surgery, University of Pittsburgh

Wednesday, January 27, 2021, 12:00pm-1:00pm, Virtual Meeting

Title: "Insights into intervertebral disc degeneration phenotypes - Lessons learned from inbred mouse strains"

Makarand Risbud, Ph.D., James J. Maguire Jr. Professor of Spine Research, Orthopaedic Surgery Division Director, Orthopaedic Research, Thomas Jefferson University

Orthopaedic Research Club Seminar Series - 2020

Wednesday, May 27, 2020, 1:00pm – 2:00pm, Virtual Meeting

Title: "Nuclear Mechanobiology for Musculoskeletal Repair"

Su Chin Heo, Ph.D., Assistant Professor of Orthopaedic Surgery, Perelman School of Medicine, University of Pennsylvania

Wednesday, April 22, 2020, 11:00am – 12:00pm, Virtual Meeting

Title: "Regulation of tendon regeneration"

Alice Huang, Ph.D., Associate Professor, Departments of Orthopaedics, Cell, Developmental, and Regenerative Biology, Icahn School of Medicine at Mount Sinai

~~**Wednesday, March 25, 2020, 4:00pm – 5:00pm, BRB252**~~ **Cancelled due to Coronavirus**

Title: "The function of mTORC1 signaling in postnatal tendon development and healing"

Kyu Sang Joeng, Ph.D., Assistant Professor of Orthopaedic Surgery, University of Pennsylvania

Wednesday, February 26, 2020, 4:00pm – 5:00pm, BRB252

Title: "Role of Sonic Hedgehog Signaling in the Regulation of Intervertebral Disc Growth and Differentiation"

Chitra Dahia, Ph.D., Assistant Professor of Cell and Developmental Biology, Weill Cornell Medicine; Director of Spine Development and Regeneration Lab, Hospital for Special Surgery

Wednesday, January 29, 2020, 4:00pm – 5:00pm, BRB252

Title: “Heterotopic ossification and FOP: How does one tissue become another?”

Eileen Shore, Ph.D., Cali/Weldon Professor, Departments of Orthopaedic Surgery and Genetics, University of Pennsylvania

Orthopaedic Research Club Seminar Series - 2019

Wednesday, December 11, 2019, 4:00pm – 5:00pm, BRB252

Title: “Functional Regeneration of Craniofacial Bone and Skeletal Muscle”

Warren Grayson, Ph.D., Associate Professor of Biomedical Engineering, Translational Tissue Engineering Center, Johns Hopkins University

Wednesday, October 30, 2019, 4:00pm – 5:00pm, CHOP ARC124

Title: “Maintenance of growth plate and articular chondrocyte phenotype by SOX9”

Ranjan Kc, Student, Division of Orthopaedic Surgery, CHOP

Title: “Sustained IKK β activation in postnatal chondrocytes accelerates the onset of age-associated murine osteoarthritis”

Sarah Catheline, Student, Division of Orthopaedic Surgery, CHOP

Wednesday, September 25, 2019, 4:00pm – 5:00pm, CHOP ARC124

Title: “New Approaches to Therapeutic Discovery & Delivery”

George Dodge, Ph.D., Associate Professor of Orthopaedic Surgery and Otorhinolaryngology, University of Pennsylvania, Director of Translational Musculoskeletal Research Center, Philadelphia Crescenz VA Medical Center

Wednesday, August 28, 2019, 4:00pm – 5:00pm, CHOP ARC124

Title: “Loads and signaling for cartilage regeneration”

Riccardo Gottardi, Ph.D., Assistant Professor of Bioengineering and Biomaterials Laboratory, CHOP

Wednesday, July 31, 2019, 4:00pm – 5:00pm, CHOP ARC124

Title: “Growth and remodeling of musculoskeletal interfaces”

Megan Killian, Ph.D., Assistant Professor of Biomedical Engineering, University of Delaware

Wednesday, May 29, 2019, 4:00pm – 5:00pm, CHOP ARC124

Title: “Applied biomechanics to improve treatment options for Achilles tendon ruptures”

Josh Baxter, Ph.D., Assistant Professor of Orthopaedic Surgery, Director of Human Motion Lab, Perelman School of Medicine, University of Pennsylvania

Wednesday, April 24, 2019, 4:00pm – 5:00pm, CHOP ARC124

Title: “Growth factor and metabolic regulation of bone formation”

Fanxin Long, Ph.D., Professor of Orthopaedic Surgery, Translational Research Program in Pediatric Orthopaedics, CHOP

Wednesday, March 27, 2019, 4:00pm – 5:00pm, CHOP ARC124

Title: “Blocking Substance P signaling reduces tissue fibrosis and improves sensorimotor declines in a rat model of overuse injury”

Mary Barbe, Ph.D., Professor of Anatomy, Cell Biology and Physical Therapy, Temple University

Wednesday, February 27, 2019, 4:00pm – 5:00pm, CHOP ARC124

Title: “Macroscopic In Vitro, In Silico, and In Vivo Models of Shoulder Reconstructions”

Michael Hast, Ph.D., Assistant Professor of Orthopaedic Surgery, Director, Biedermann Lab for Orthopaedic Research, Perelman School of Medicine, University of Pennsylvania

Wednesday, January 23, 2019, 4:00pm – 5:00pm, CHOP ARC124

Title: “Deciphering the molecular basis of SOXopathies, developmental syndromes due to mutations affecting SOX transcription factor activities”

Veronique Lefebvre, Ph.D., Professor of Orthopaedic Surgery, Translational Research Program in Pediatric Orthopaedics, Children's Hospital of Philadelphia

Orthopaedic Research Club Seminar Series - 2018

Wednesday, November 28, 2018, 4:00pm – 5:00pm, CHOP ARC124

Title: “Altered bone metabolism by hyperglycemia: a new function of an old metabolite”

Xin, Li, Ph.D., Associate Professor of Basic Science and Craniofacial Biology-College of Dentistry, New York University

Wednesday, October 31, 2018, 4:00pm – 5:00pm, CHOP ARC124

Title: “Primary cilia are essential for cell alignment and polarity during bone development through regulating Ceramide-PKC α apicobasal polarity signaling.”

Jormay Lim, Student, Department of Anatomy & Cell Biology, University of Pennsylvania, School of Dental Medicine

Title: “Potential therapeutic targets to reduce osteochondromas in patients with Hereditary Multiple Exostoses”

Christina Mundy, Student, Department of Orthopaedic Surgery, CHOP

Wednesday, October 4, 2018, 4:00pm – 5:00pm, JMB Class of ‘62

Title: “Identification of periosteal progenitors involved in bone healing”

Brya Matthews, Ph.D., Senior Research Fellow, Department of Molecular Medicine and Pathology, University of Auckland, New Zealand

Wednesday, September 26, 4:00pm – 5:00pm, CHOP ARC124

Title: “Large Gap Peripheral Nerve Regeneration with Orofacial Stem Cells Based Nerve Guidance Conduits”

Ahn D. Le, DDS, Ph.D., Chair and Norman Vine Endowed Professor of Oral Rehabilitation, Department of Oral & Maxillofacial Surgery/Pharmacology, Penn Dental Medicine

Wednesday, August 29, 2018, 4:00pm – 5:00pm, CHOP ARC124

Title: “Insulin-mimetic salt induces of bone formation and inhibits osteoclast differentiation and fusion to restore cortical porosity in a type I diabetic-induced osteolysis rat model”

David Paglia, Ph.D., Investigator of Orthopaedics, Rutgers University

Wednesday, June 19, 2018, 4:00pm – 5:00pm, Smilow 9-146AB

Title: “Rotator Cuff Repair - From Bench to Bedside, Challenges and Opportunities”

Andy Kuntz, M.D., Assistant Professor of Orthopaedic Surgery, Director, Shoulder Study Group
Perelman School of Medicine, University of Pennsylvania

Wednesday, May 30, 2018, 4:00pm – 5:00pm, CHOP ARC124

Title: “Skeletal/mesenchymal stem cells: how much do we know about them? A lineage-tracing perspective”

Noriaki Ono, Ph.D., Assistant Professor of Orthodontics and Pediatric Dentistry, University of Michigan School of Dentistry

Wednesday, April 25, 2018, 4:00pm – 5:00pm, CHOP ARC124

Title: “Forceful feedback: mechanosensation in cell motility and morphogenesis”

Joel Boerckel, Ph.D., Assistant Professor of Orthopaedic Surgery and Bioengineering, University of Pennsylvania

Wednesday, March 28, 2018, 4:00pm – 5:00pm, CHOP ARC124

Title: “New Therapeutic Strategies for Preventing Cartilage Degeneration and Post-Traumatic Osteoarthritis”

Christopher Price, Ph.D., Assistant Professor of Dept. of Biomedical Engineering, University of Delaware

Wednesday, February 21, 2018, 4:00pm – 5:00pm, CHOP ARC124

Title: “Morphogenesis of articular cartilage: implications for repair strategies”

Maurizio Pacifici, Ph.D., Director and Professor of Translational Research Program in Pediatric Orthopaedics, CHOP

Wednesday, January 17, 2018, 4:00pm – 5:00pm, CHOP ARC124

Title: “Hand transplantation: current challenges and future prospects”

L. Scott Levin, M.D., Paul B. Magnuson Professor of Bone & Joint Surgery, Chair, Department of Orthopaedic Surgery, Professor of Surgery (Plastic Surgery), Perelman School of Medicine, University of Pennsylvania

Orthopaedic Research Club Seminar Series - 2017

Wednesday, November 29, 2017, 4:00pm – 5:00pm, CHOP ARC124

Title: “Novel Spectroscopic Imaging Tools for Assessment of Musculoskeletal Tissues”

Nancy Pleshko, Ph.D., Professor of Bioengineering, Temple University

Wednesday, October 25, 2017, 4:00pm – 5:00pm, CHOP ARC124

Title: “Inflammatory Signals in Stress Fracture Risk and Repair”

Ryan Tomlinson, Ph.D., Assistant Professor of Orthopaedic Surgery, Thomas Jefferson University

Wednesday, September 28, 2017, 4:00pm – 5:00pm, CHOP ARC124

Title: “In vivo Bone Quality Assessment by Phosphorus and Proton MRI”

Xia Zhao, Ph.D. Student, Department of Radiology, Perelman School of Medicine, University of Pennsylvania

Title: “Hox Genes in the Adult Skeleton: Patterning Cues Beyond Embryonic Development”

Danielle Rux, Ph.D., Postdoctoral Researcher, Department of Orthopaedic Surgery, CHOP

Wednesday, August 30, 2017, 4:00pm – 5:00pm, CHOP ARC124

Title: “Vitamin D deficiency in the 21st Century: New Insights into an Old Problem”

Michael Levine, M.D., Ph.D., Chief of the Division of Endocrinology and Diabetes and Director of the Center for Bone Health at CHOP

Wednesday, June 28, 2017, 4:00pm – 5:00pm, CHOP ARC124

Title: “Mechanisms of PTH Bone Anabolic Action - New Perspectives on an Old Topic”

Mei Wan, Ph.D., Professor of Orthopaedic Surgery, Johns Hopkins University School of Medicine

Wednesday, May 24, 2017, 4:00pm – 5:00pm, CHOP ARC124

Title: ““Micro-noodles” for Cartilage Repair: A Strategy to Achieve Tunable Cell shape, Mechanosensing, and ECM organization in 3-D”

Li-Hsin Han, Ph.D., Assistant Professor of Mechanical Engineering and Mechanics, College of Engineering, Drexel University

Wednesday, April, 2017, 4:00pm – 5:00pm, CHOP ARC124

Title: “Regulators of cartilage development and maintenance”

Li Zheng, Ph.D., Tufts University School of Medicine

Wednesday, March 28, 2017, 4:00pm – 5:00pm, CHOP ARC124

Title: “Tendon Healing in a Rotator Cuff Animal Model”

Lou Soslowsky, Ph.D., Fairhill Professor of Orthopaedic Surgery, Associate Dean for Research Integration, Perelman School of Medicine, University of Pennsylvania

Wednesday, February 22, 2017, 4:00pm – 5:00pm, CHOP ARC124

Title: “Infections in synovial fluid: new challenges”

Noreen Hickok, Ph.D., Associate Professor of Orthopaedic Surgery, Thomas Jefferson University

Wednesday, January 24, 2017, 4:00pm – 5:00pm, CHOP ARC124

Title: “Defining the lineage of tendon and ligament cells”

Nat Dymant, Ph.D., Assistant Professor of Orthopaedic Surgery, University of Pennsylvania

Orthopaedic Research Club Seminar Series - 2016

Wednesday, December 7, 2016, 4:00pm – 5:00pm, CHOP ARC124

Title: “Mechanism of Ciliary Intraflagellar Transport Protein in Bone Formation”

Shuying Yang, M.D., M.S., Ph.D., Associate Professor of Anatomy and Cell Biology, Dental School, University of Pennsylvania

Wednesday, November 2, 2016, 4:00pm – 5:00pm, CHOP ARC124

Title: “Multiscale Mechanisms of Low Back Pain”

Simon Tang, Ph.D., Assistant Professor of Orthopaedic Surgery, Washington University

Wednesday, September 28, 2016, 4:00pm – 5:00pm, CHOP ARC124

Title: “Recent Developments in Imaging Techniques for Evaluation of Bone Disorders”

Chamith Rajapske, Ph.D., Assistant Professor of Radiology, University of Pennsylvania

Wednesday, July 27, 2016, 4:00pm – 5:00pm, CHOP ARC124

Title: “Applied MRI Quantitative Imaging Sequences and Tissue Engineering for the Treatment of Intervertebral Disc Degeneration”

Harvey Smith, M.D., Assistant Professor of Orthopaedic Surgery, University of Pennsylvania

Wednesday, June 22, 2016, 4:00pm – 5:00pm, CHOP ARC124

Title: “Understanding the mechanism of bone growth after MSC infusion”

Satoru Otsuru, Trainee, CHOP

Title: “Mesenchymal stem cell transplantation identifies miR151-5p as a therapeutic target for systemic sclerosis”

Chider Chen, Ph.D., Postdoc, University of Pennsylvania, School of Dental Medicine

Wednesday, May 25, 2016, 4:00pm – 5:00pm, CHOP ARC124

Title: “Inflammatory pathway activation in osteoarthritis: insights from patients and animal models”

Carla Scanzello, M.D., Ph.D., Assistant Professor, Department of Medicine, University of Pennsylvania

Wednesday, April 27, 2016, 4:00pm – 5:00pm, CHOP ARC124

Title: “Prevention of the Post-traumatic Fibrotic Response in Joints”

Andrzej Fertala, Ph.D., Professor of Orthopaedic Surgery, Thomas Jefferson University

Wednesday, March 23, 2016, 4:00pm – 5:00pm, CHOP ARC124

Title: “The role of CITED2 in cartilage and tendon: A basic study searching for translation”

Herb Sun, Ph.D., Associate Professor of Radiation Oncology and Orthopaedic Surgery, Albert Einstein College of Medicine

Wednesday, February 24, 2016, 4:00pm – 5:00pm, CHOP ARC124

Title: “The roles of Indian hedgehog in temporo-mandibular joint (TMJ) development and postnatal function”

Eiki Koyama, Ph.D., Professor of Bioengineering, University of Pennsylvania

Wednesday, January 27, 2016, 4:00pm – 5:00pm, CHOP ARC124

Title: “Engineering Hydrogels for Cartilage Repair”

Jason Burdick, Ph.D., Professor of Bioengineering, University of Pennsylvania

Orthopaedic Research Club Seminar Series - 2015

Wednesday, December 2, 2015, 4:00pm – 5:00pm, CHOP ARC124

Title: “Intervertebral disc degeneration and repair”

Yejia Zhang, M.D., Ph.D., Assistant Professor. Department of Physical Medicine and Rehabilitation, University of Pennsylvania

Wednesday, October 28, 2015, 4:00pm – 5:00pm, CHOP ARC124

Title: “Regenerative stem cell therapies to restore diseased skeletal muscles”

Foteini Mourkioti, Ph.D., Assistant Professor, Departments of Orthopaedic Surgery, Cell and Developmental Biology, University of Pennsylvania

Wednesday, September 23, 2015, 4:00pm – 5:00pm, CHOP ARC124

Title: "Contribution of Wnt/b-catenin-Responsive Cells to Articular and Growth Plate Cartilage Growth"

Yu Usami, Department of Surgery, Children's Hospital of Philadelphia

Title: "Modulation of osteoclast function: finding a niche in Notch signaling"

Jason Ashley, Ph.D., Postdoctoral Fellow, Department of Orthopaedic Surgery, University of Pennsylvania

Wednesday, August 26, 2015, 4:00pm – 5:00pm, CHOP ARC124

Title: "Trying to Make Sense of it All: The Regulation of Fracture Healing in a Trauma Setting"

Samir Mehta, M.D., Assistant Professor of Orthopaedic Surgery, University of Pennsylvania

Wednesday, July 29, 2015, 4:00pm – 5:00pm, CHOP ARC124

Title: "Nanomechanics: A Novel Interdisciplinary Tool to Uncover the Pathogenesis of Osteoarthritis"

Lin Han, Ph.D., Assistant Professor, School of Biomedical Engineering, Science & Health Systems, Drexel University

Wednesday, June 24, 2015, 4:00pm – 5:00pm, CHOP ARC124

Title: "Skeletal Stem Cells: is the jaw bone connected to the hip bone?"

Abhishek Chandra, Ph.D., Postdoctoral Fellow, Department of Orthopaedic Surgery, University of Pennsylvania

Title: "Effects of Pregnancy, Lactation, and Weaning on Maternal Bone Quality"

Chantel de Bakker, Ph.D. Student, Department of Bioengineering, University of Pennsylvania

Wednesday, May 27, 2015, 4:00pm – 5:00pm, CHOP ARC124

Title: "Skeletal Stem Cells: is the jaw bone connected to the hip bone?"

Sunday Akintoye, BDS, DDS, MS, Associate Professor of Oral Medicine, School of Dental Medicine University of Pennsylvania

Wednesday, April, 22, 2015, 4:00pm – 5:00pm, CHOP ARC124

Title: "Unraveling the Etiology of Spine Disease in Mucopolysaccharidosis Disorders"

Lachlan Smith, Ph.D., Assistant Professor of Neurosurgery, University of Pennsylvania

Wednesday, March 18, 2015, 4:00pm – 5:00pm, CHOP ARC124

Title: "Roles of Myo/Nog Cells in Embryogenesis, Wound Healing and Neuroprotection"

Minday George-Weinstein, Ph.D., Professor of Biomedical Sciences, Cooper Medical School of Rowan University

Wednesday, February 25, 2015, 4:00pm – 5:00pm, CHOP ARC124

Title: "Osteocyte's hairy pericellular matrix in mechanosensing"

Liyun Wang, Ph.D., Associate Professor of Mechanical Engineering, University of Delaware

Orthopaedic Research Club Seminar Series - 2014

Wednesday, December 10, 2014, 4:00pm – 5:00pm, CHOP ARC124

Title: "Mesenchymal stem cells: from clinics to bench-top and back"

Songtao Shi, DDS, MS, Ph.D., Department of Oral and Maxillofacial Surgery / Pharmacology, School of Dental Medicine, University of Pennsylvania

Wednesday, October 10, 2014, 4:00pm – 5:00pm, CHOP ARC124

Title: "Previously unsuspected defects in the cranial base of a mouse model of Hereditary Multiple Exostoses"

Federica Sgariglia, Ph.D., Postdoctoral Fellow, Department of Surgery, CHOP

Title: "In situ fibril stretch and sliding is location-dependent in mouse supraspinatus tendons"

Brianne Connizzo, PhD Student, Department of Bioengineering, University of Pennsylvania

Wednesday, September 9, 2014, 4:00pm – 5:00pm, CHOP ARC124

Title: "Prevention and Treatment of Post-traumatic Osteoarthritis"

X. Lucas Lu, Ph.D., Assistant Professor of Mechanical Engineering, University of Delaware

Wednesday, August 13, 2014, 4:00pm – 5:00pm, CHOP ARC124

Title: "Enhancing fracture healing: lessons from our rodent friends"

Jaimo Ahn, M.D., Ph.D., Associate Professor of Orthopaedic Surgery, University of Pennsylvania

Wednesday, June 25, 2014, 4:00pm – 5:00pm, CHOP ARC124

Title: "GNAS inactivation in Progressive Osseous Heteroplasia (POH) and skeletal development"

Girish Ramaswamy, Ph.D., Postdoctoral Fellow, Orthopaedic Surgery, University of Pennsylvania

Title: "Load transmission between collagen fibrils in tendon through interfibrillar shear stress"

Spencer Szczesny, Ph.D., Postdoctoral Fellow, Orthopaedic Surgery, University of Pennsylvania

Wednesday, May 28, 2014, 4:00pm – 5:00pm, CHOP ARC124

Title: "Specification and maintenance of permanent articular cartilage"

Masahiro Iwamoto, Ph.D., Associate Professor of Orthopaedic Surgery, CHOP

Wednesday, April 30, 2014, 4:00pm – 5:00pm, CHOP ARC124

Title: "Forces and factors from muscle that modulate bone"

Elizabeth Barton, Ph.D., Associate Professor of Anatomy and Cell Biology, University of Pennsylvania, School of Dental Medicine

Wednesday, March 26, 2014, 4:00pm – 5:00pm, CHOP ARC124

Title: "Osteoblastic cells regulate the response of bone to inflammation"

Dana Graves, Ph.D., Professor of Periodontics, Dental School, University of Pennsylvania

Wednesday, February 26, 2014, 4:00pm – 5:00pm, CHOP ARC124

Title: "Regeneration - ASK1, can it provide some answers?"

Theresa Freeman, Ph.D., Associate Professor of Orthopaedic Surgery, Thomas Jefferson University

Wednesday, January 15, 2014, 4:00pm – 5:00pm, BRB Room 252

Title: "Material and Mechanobiologic Considerations for Engineering Dense Connective Tissues"

Robert Mauck, Ph.D., Associate Professor of Orthopaedic Surgery and Bioengineering, University of Pennsylvania