



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

## **Orthopaedic Research Club Seminar Series – 2022**

## 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 $\beta$  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-PKCz 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 Dyment, 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