Visiting Professorship Series-Academic Year 2015-2016

**Tuesday, May 17, 2016, 1:30-2:30/CRB Austrian Auditorium**
Microenvironmental regulation of skeletal muscle stem cell function
Alessandra Sacco, Ph.D.
Associate Professor
Development, Aging and Regeneration Program (DARe)
Sanford Burnham Medical Research Institute

**Tuesday, April 19, 2016, 1:30-2:30pm/CRB Austrian Auditorium**
Genome and Epigenome editing for Gene Therapy and Programming Cell Fate
Charles Gersbach, Ph.D.
Associate Professor of Biomedical Engineering
Assistant Professor of Orthopaedic Surgery
Duke University

**Tuesday, March 22, 2016, 1:30-2:30pm/ Class of 62 Auditorium, JMB**
Scar Wars: New Frontiers in Flexor Tendon Repair
Hani Awad
Professor of Biomedical Engineering
Professor of Orthopaedics
University of Rochester

**Tuesday, February 16, 2016, 1:30-2:30pm/TBD**
Unravelling the neurobiology of osteoarthritis pain
Anna-Marie Malfait, MD, PhD
Associate Professor of Medicine and Biochemistry
Rush University Medical Center

**Tuesday, January 19, 2016, 1:30-2:30pm/TBD**
Role of Connexin43 in Cortical Bone Adaptation to Mechanical Load
Roberto Civitelli, MD, PhD
Associate Professor of Chemical & Biological Engineering
BioFrontiers Institute

**Tuesday, December 15, 2015, 1:30-2:30pm/CRB Auditorium**
TGF-beta Integration of Physical and Biochemical Cues in the Skeleton
Tamara Alliston, PhD
Associate Professor, Department of Orthopaedic Surgery
University of California, San Francisco

**ANNUAL SCIENTIFIC SYMPOSIUM (all day event)**
Thursday, November 19, 2015, 9:30-5:30pm/BRB Auditorium
Title: "Treatment of Musculoskeletal Diseases with a little help from your own Stem Cells"
Visiting Professorship Series-Academic Year 2014-2015

Thursday, July 23, 2015, 1:30-2:30pm/8-146AB SCTR
The Osteoimmunology of Bone Infection and Development of a Passive Immunization for MRSA Osteomyelitis
Edward Schwarz, PhD, Professor of Orthopaedics and Associate Director of the Center for Musculoskeletal Research
University of Rochester, Rochester, NY

Tuesday, June 23, 2015, 1:30-2:30pm/BRB 252 PCMD-PCI Industrial Interaction Seminar
Working with the Penn Center for Innovation to protect and commercialize your research.
Viviane Martin, PhD, Director, PSOM Licensing Group, Penn Center for Innovation
Sarah Frew, MBA, Director, Corporate Contracts and Alliances, Penn Center for Innovation

Friday, May 22, 2015, 11:00am-12:00pm/BRB 252
Effects of Space Travel on Spine Function and Injury Tolerance
Jeffrey Lotz, PhD
Professor of Orthopaedic Surgery, Director of the Orthopaedic Bioengineering Laboratory
University of California, San Francisco

Tuesday, May 12, 2015, 1:30-2:30pm/10-146 SCTR
Cell and Extracellular Matrix Dynamics in Skeletal Tissues
Sarah L. Dallas, PhD
Professor of Oral and Craniofacial Sciences, University of Missouri, Kansas City

Tuesday, April 21, 2015, 1:30-2:30pm/10-146 SCTR
Orthopedic Tissue Engineering by Epigenetic Landscaping
Andre J. van Wijnen, PhD
Professor of Orthopedic Surgery & Biochemistry and Molecular Biology, Mayo Clinic

Tuesday, March 10, 2015, 1:30-2:30pm/11-146 SCTR
Title: “Bone Health in Microgravity — Use It or Lose It”
Mary L. Bouxsein, PhD
Associate Professor of Orthopedic Surgery, Harvard Medical School

Tuesday, February 10, 2015, 1:30-2:30pm/10-146 SCTR
Pluripotent Stem Cell Repair of Osteochondral Defects
Darryl D’Lima, MD, PhD
Associate Professor, Scripps Translational Science Institute
Tuesday, January 20, 2015, 1:30-2:30pm/10-146 SCTR
Synthetic Hydrogel Niches for Musculoskeletal Tissue Engineering
Stephanie J. Bryant, PhD
Associate Professor of Chemical & Biological Engineering, BioFrontiers Institute

Tuesday, December 09, 2014, 1:30-2:30pm/10-146 SCTR
Small Leucine Rich Proteoglycans: Fine Tune Regulators of Skeletal Function
Marian F. Young, PhD
Chief of the Molecular Biology of Bones and Teeth Section, National Institutes of Health/NIDCR

ANNUAL SCIENTIFIC SYMPOSIUM (all day event)
Wednesday, November 14, 2014, 10:45-5:30pm/BRB Auditorium
How PTHrP Regulates Chondrocyte Differentiation
Henry M. Kronenberg, MD
Professor of Medicine, Harvard Medical School

Tuesday, October 28, 2014, 1:30-2:30pm/10-146 SCTR
The Strategic Role of Parathyroid Hormone in Resolution of Osseous Healing and Regeneration of Bone
Laurie K. McCauley, DDS, PhD
William K. and Mary Anne Najjar Professor, University of Michigan

Tuesday, September 16, 2014, 1:30-2:30pm/11-146 SCTR
Development of a Gene-based Therapy for Osteoarthritis: Safety and Efficacy in an Equine Model
Steven C. Ghivizzani, PhD
Professor of Orthopaedics & Rehabilitation, University of Florida

Visiting Professorship Series-Academic Year 2013-2014

Tuesday, May 13, 2014, 1:30-2:30/CRB Austrian Auditorium
A translational approach to development of novel treatments for osteoarthritis-associated pain and joint tissue structural failure
Gloria Matthews, D.V.M, Ph.D., DACVS
Senior Director of Orthopaedic/Regenerative Medicine Research &Early Development, Genzyme, a Sanofi Company

Tuesday, April 22, 2014, 1:30-2:30pm/CRB Austrian Auditorium
Dissecting the mechanisms of anabolic signaling in bone
Fanxin Long, Ph.D.
Professor of Internal Medicine Endocrinology, Metabolism & Lipid Research, Washington University, St Louis

Tuesday, March 25, 2014, 1:30-2:30/CRB Austrian Auditorium
Structure & Symptom Modifying Therapies for Painful Disc Degeneration
James C. Iatridis, Ph.D.
Professor and Director of Spine Research, Mount Sinai School of Medicine

Tuesday, February 18, 2014, 1:30-2:30pm/CRB Austrian Auditorium
Solid State MR Spectroscopy and Imaging of Bone Mineral and Matrix
Jerome L. Ackerman, Ph.D.
Associate Professor in Radiology, Harvard Medical School

Tuesday, January 21, 2014, 1:30-2:30pm/CRB Austrian Auditorium
Osseointegration Past Present and Future
Mathias Bostrom, M.D.
Professor of Orthopaedic Surgery, Hospital for Special Surgery
Tuesday, December 10, 2013, 1:30-2:30pm/CRB Austrian Auditorium
Epigenetic regulation of stem cell phenotypic plasticity and hedgehog signaling during early cartilage development
Andrew Lasser, Ph.D.
Professor of Biological Chemistry and Molecular Pharmacology, Harvard Medical School

ANNUAL SCIENTIFIC SYMPOSIUM (all day event)
Wednesday, November 13, 2013, 10:45am-5:30pm/BRB Auditorium
Managing Science and Innovating in Challenging Times
Joan A. McGowan, Ph.D.
Director, Division of Musculoskeletal Diseases
National Institutes of Health, National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS)

Tuesday, October 22, 2013, 1:30-2:30pm/CRB Austrian Auditorium
The Biomolecular Science and Engineering of Bone's Extracellular Matrix
Deepak Vashishth, Ph.D.
Professor & Department Head of Biomedical Engineering, Rensselaer Polytechnic Institute

Tuesday, September 17, 2013, 1:30-2:30pm/CRB Austrian Auditorium
Engineering Human Osteochondral Grafts
Gordana Vunjak-Novakovic, Ph.D.
Mikati Foundation Professor of Biomedical Engineering; Professor of Medical Sciences (in Medicine)
Columbia University

Visiting Professorship Series-Academic Year 2012-2013

Tuesday, May 07, 2013, 1:00-2:00pm/ Austrian Auditorium CRB
Mechanical and Biological Regulation of Tissue Regeneration
Robert E. Guldberg, Ph.D.
Professor, Woodruff School of Mechanical Engineering, Georgia Institute of Technology

Tuesday, April 09, 2013, 1:30-2:30pm/Austrian Auditorium CRB
Tendon Stem Cells, Tendinopathy, and Tendon Repair
James H-C. Wang, Ph.D.
Professor and Director MechanoBiology Laboratory, University of Pittsburgh

Tuesday, March 12, 2013, 1:30-2:30pm/Austrian Auditorium CRB
Richard F. Loeser Jr, M.D.
Professor of Internal Medicine- Rheumatology & Immunology, Wake Forest University

Tuesday, February 12, 2013, 1:30-2:30pm/Austrian Auditorium CRB
Coupling Bone Resorption and Formation
Xu Cao, Ph.D.
Lee Riley Professor and Co-Director Center for Musculoskeletal Research, Johns Hopkins University

Tuesday, January 15, 2013, 1:30-2:30pm/Austrian Auditorium CRB
Sensorimotor and Serum Biomarkers Indicative of Underlying Pathologies in a Rat Model of Upper Extremity Overuse
Mary Barbe, Ph.D.
Professor of Anatomy & Cell Biology, Temple University

Tuesday, December 18, 2012, 1:00-2:00pm/252 BRB
A Novel Biomarker of Early Post-Traumatic Osteoarthritis Using the Horse as an Animal Model
Lisa A. Fortier, DVM, Ph.D, DACVS
Associate Professor of Surgery, Cornell University
ANNUAL SCIENTIFIC SYMPOSIUM (all day event)
Wednesday, November 14, 2012, 10:45am-5:30pm/BRB Auditorium
Osteoarthritis: From Palliation to Prevention
Constance R. Chu, M.D.
Albert Ferguson Professor of Orthopaedic Surgery, University of Pittsburgh

Tuesday, October 23, 2012, 1:00-2:00pm/Austrian Auditorium CRB
William L. Murphy, Ph.D.
Associate Professor, University of Wisconsin-Madison

Tuesday, September 11, 2012, 1:30-2:30pm/251 BRB
Joint Injury and Osteoarthritis
Joseph A. Buckwalter, M.S., M.D.
Professor, Head and Arthur Steindler Chair, University of Iowa

Visiting Professorship Series-Academic Year 2011-2012

Tuesday, May 29, 2012, 1:00-2:00pm/251 BRB
Marfan Syndrome: Molecular Pathology and Therapeutic Opportunities
Francesco Ramirez, D.Sc.
Professor of Pharmacology and Systems Therapeutics, Professor of Medicine-Cardiology, Mount Sinai Medical Center

Tuesday, April 24, 2012, 1:00-2:00pm/251 BRB
The Role of the OSteocyte in Muscle-Bone Crosstalk
Lynda F. Bonewald, Ph.D.
Interim Vice Chancellor for Research and Curators Professor, University of Missouri at Kansas City

Tuesday, April 10, 2012, 2:00-3:00pm/251 BRB
Musculoskeletal Medicine in the Comparative Effectiveness Era
Edward Schwarz, Ph.D.
Director, Center for Musculoskeletal Research
Richard Margaret Burton Distinguished Professor in Orthopaedics, University of Rochester Medical Center

Tuesday, March 27, 2012, 1:00-2:00pm/251 BRB
Magnetic Resonance Imaging of Short T2 Tissues
Graeme Bydder, M.B., Ch.B.
Professor of Radiology, University of California, San Diego

Tuesday, February 28, 2012, 1:00-2:00pm/251 BRB
The Carpus: The Beauty and the Beast of the Upper Extremity
J.J. Trey Crisco, Ph.D.
Henry Frederick Lippitt Professor of Orthopaedic Research, Director Bioengineering Laboratory, Department of Orthopaedics, The Warren Alpert Medical School of Brown University and Rhode Island Hospital

Tuesday, January 24, 2012, 1:00-2:00pm/251 BRB
Chondrocyte Beta-catenin Signaling Regulates Osteoclastogenesis
Di Chen, M.D., Ph.D.
Professor of Biochemistry, John W. and Helen Watzek Endowed Chair, Rush University Medical Center

Monday, January 9, 2012, 12:00-1:00pm/251 BRB
Statistically Significant Collaborations: How Biostatistics Can Contribute to Multidisciplinary Research
Kathleen Propert, Ph.D.
Professor of Biostatistics, Department of Biostatistics & Epidemiology, University of Pennsylvania, Perelman School of Medicine
Tuesday, December 13, 2011, 1:00-2:00pm/251 BRB
Stem Cell Mobilization and Wnt Signaling – Two Approaches to Enhancing Bone Regeneration
D. Rick Sumner, Ph.D.
Professor for Medical Research and Chair, Department of Anatomy and Cell Biology, Rush Medical College

Tuesday, November 15, 2011, 1:00-2:00pm/10-146 TRC
Maintaining and Enhancing Bone Morphology Via Exercise
Ted Gross, Ph.D.
Professor of Orthopaedics and Sports Medicine and Director, Orthopaedic Science Laboratories
University of Washington

ANNUAL SCIENTIFIC SYMPOSIUM (all day event)
Wednesday, October 26, 2011, 8:00am-2:45pm/BRB Auditorium
Mechanisms of Pathological Bone Remodeling: Pathology Teaches Physiology
Steven R. Goldring, M.D.
St. Giles Chair and Chief Scientific Officer, Hospital for Special Surgery and Professor of Medicine, Weill Cornell Medical College

Visiting Professorship Series-Academic Year 2010-2011

Tuesday, April 5, 2011, 1:00-2:00pm/ BRB 252
Acoustoelasticity Analysis of Ultrasound Signals for Biomechanical Behavior
Ray Vanderby, Jr., Ph.D.
Professor of Orthopaedic Surgery and Biomedical Engineering, University of Wisconsin, Madison

Tuesday, March 1, 2011, 1:00-2:00 pm/ BRB 252
Blood Supply and Fracture Repair: Bedside to Bench
Theodore Miclau, III, M.D.
Professor and Vice Chair, Trauma/Problem Fracture, Department of Orthopaedic Surgery
University of California, San Francisco

Tuesday, February 1, 2011, 1:00-2:00pm/ BRB 253
Osteoarthritis: Translating New Insight into Pathogenesis to Prevention and Treatment
Martin Lotz, M.D.
Professor and Head, Division of Arthritis Research, The Scripps Research Institute, La Jolla, California

Tuesday, January 18, 2011, 1:00-2:00pm/ BRB 253
Between a Muscle and a Hard Bone: The Regulation of Tendon Induction and Differentiation
Ronen Schweitzer, Ph.D.
Associate Professor, Shriners Hospital-Research Dept. of Cell and Developmental Biology, Oregon Health and Science University

Tuesday, December 14, 2010, 1:00-2:00pm/ BRB 251
Oxygen Sensing in Cartilage and Bone Development
Ernestina Schipani, M.D., Ph.D.
Associate Professor of Medicine, Division of Endocrinology, Massachusetts General Hospital-Harvard Medical School

ANNUAL SCIENTIFIC SYMPOSIUM (all day event)
Wednesday, November 17, 2010, 8:00am-3:00pm/BRB Auditorium
Musculoskeletal Regenerative Medicine
Michael Yaszhemski, M.D., Ph.D.
Professor of Orthopaedics and Bioengineering, and the Director of the Tissue Engineering and Biomaterials Laboratory, Mayo Clinic, Minnesota
Tuesday, October 5, 2010, 1:00-2:00pm/ BRB 251
Measurement of the Local Mechanical Environment of Skeletal Tissues
Elise F. Morgan, PhD
Associate Professor, Mechanical Engineering, Biomedical Engineering, Orthopaedic Surgery, Boston University

Tuesday, September 14, 2010, 1:00-2:00pm/BRB 253
Histone Deacetylases Play Crucial Roles in Bone Development and Skeletal Health
Jennifer Westendorf, Ph.D.
Associate Professor of Biochem/Molecular Biology and Orthopedics, Mayo Clinic, Minnesota

Visiting Professorship Series-Academic Year 2009-2010

Tuesday, May 18, 2010, 1:00-2:00pm/ BRB 251
The Role of Mechanical Loading in Tendon-to-Bone Healing: Our Experience with Small Animal Models
Scott A. Rodeo, MD
Professor of Orthopaedic Surgery, Weill Cornell Medical College, New York, NY
Attending Orthopaedic Surgeon, New York-Presbyterian Hospital
Attending Orthopaedic Surgeon, Hospital for Special Surgery, New York, NY

Tuesday, April 13, 2010, 1:00-2:00pm/BRB 251
Biomechanics of Reactive Mixtures: Modeling Growth and Active Transport
Gerard A. Ateshian, Ph.D.
Professor of Mechanical Engineering and Biomedical Engineering
Columbia University, New York, NY

Tuesday, March 16, 2010, 1:00-2:00 pm/BRB 251
The Biomechanics of Osteoarthritis: Progress vs. Progression?
Joel A. Block, M.D.
The Willard L. Wood M.D. Professor of Rheumatology
Director, Section of Rheumatology, Rush Medical College, Rush University Medical Center, Chicago, IL

Tuesday, February 16, 2010, 1:15-2:15pm/BRB 251
Exploiting the Physical Environment to Optimize Stem Cells for Skeletal Regeneration
Henry J. Donahue, Ph.D.
Baker Professor and Vice Chair for Research
Director, Division of Musculoskeletal Sciences
Director, Department of Orthopaedics and Rehabilitation, Pennsylvania State University College of Medicine

Tuesday, January 19, 2010, 1:00-2:00pm/BRB 1412
Biologic Enhancement of ACL Repair and Reconstruction
Martha M. Murray, M.D.
Assistant Professor and Clinical Associate Orthopaedic Surgeon, Children’s Hospital and Harvard Medical School, Boston, MA

Tuesday, December 15, 2009, 1:00-2:00pm/BRB 251
Integration of Signaling Pathways in the Growth Plate
Karen M. Lyons, Ph.D.
Professor of Orthopaedic Surgery, Department of Biological Chemistry, University of California, Los Angeles

Tuesday, November 17, 2009, 1:00-2:00pm/JMB Class of ‘62
Using Mechanical Loading to Enhance Bone Mass
Marjolein CH van der Meulen, Ph.D.
Professor, Sibley School of Mechanical and Aerospace Engineering, Cornell University
Senior Scientist, Laboratory for Biomedical Mechanics & Materials, Hospital for Special Surgery, New York
ANNUAL SCIENTIFIC SYMPOSIUM (all day event)
Wednesday, October 14, 2009, 8:00am-2:45pm/BRB Auditorium
Molecular and Cellular Control of Skeletal Morphogenesis
Bjorn R. Olsen, M.D., Ph.D.
Hersey Professor of Cell Biology, Harvard Medical School
Professor and Chair of Oral and Developmental Biology, Dean for Research, Harvard School of Dental Medicine

Tuesday, September 22, 2009, 2:00-2:30pm/JMB Class of ‘62
Technology Transfer at Penn
Robert H. Schenkel, Ph.D.
Director Life Sciences Licensing, Center for Technology Transfer, University of Pennsylvania

Tuesday, September 22, 2009, 1:00-2:00pm/JMB Class of ‘62
Making Cartilage: Architecture, Scaffolding and Builders
Brian Johnstone, Ph.D.
Director of Research, Department of Orthopaedics and Rehabilitation, Oregon Health & Science University

Visiting Professorship Series-Academic Year 2008-2009

Tuesday, May 5, 2009, 1:00-2:00pm/Room TBA
Effect of Mechanical Forces on Soft Tissue Healing
Jo A. Hannafin, MD, PhD  cancelled
Attending Orthopaedic Surgeon and Director of Orthopaedic Research, Hospital for Special Surgery, New York

Tuesday, April 21, 2009, 1:00-2:00pm/BRB 251
Mechanotransduction Mechanisms in Connective Tissue Cells
Albert J. Banes PhD
Professor of Biomedical Engineering
President of Flexcell International Corp, North Carolina State University and University of North Carolina Chapel Hill

Tuesday, March 3, 2009, 1:00-2:00 pm/BRB 251
Gene: Environment Interaction in Osteoarthritis
Joanne Jordan, MD, MPH
Director, Thurston Arthritis Research Center
Chief, Division of Rheumatology, Allergy, and Immunology , University of North Carolina

Thursday, February 26, 2009, 1:00-2:00pm/BRB 252
The Influence of Interleukin-1 and Mechanical Loading on the
Release of Nitric Oxide and Prostaglandin E_2 by Articular Chondrocytes
David Lee, PhD
Professor of Cell and Tissue Engineering, Queen Mary University of London

Tuesday, February 3, 2009, 1:00-2:00pm/BRB 251
BMPs Mediate Bone Homeostasis
Vicki Rosen, PhD
Professor and Chair of Developmental Biology, Harvard School of Dental Medicine

Tuesday, January 13, 2009, 1:00-2:00pm/BRB 251
Effect of Mechanical Forces on Soft Tissue Healing
Jo A. Hannafin, MD, PhD rescheduled May 5
Attending Orthopaedic Surgeon and Director of Orthopaedic Research, Hospital for Special Surgery, New York
Quantitative Assessment of Bone by Radiologic Methods
Thomas N. Hangartner, PhD, FAAPM
Distinguished Professor of Biomedical Engineering, Medicine & Physics
Director, BioMedical Imaging Laboratory, Wright State University

ANNUAL SCIENTIFIC SYMPOSIUM (all day event)
Wednesday, November 12, 2008, 8:00am-3:30pm/BRB Auditorium
Osteoarthritis and Fat: The Good, the Bad, and the Ugly
Farshid Guilak, PhD
Ormandy Professor and Director of Orthopaedic Research, Duke University

Matrix Elasticity Directs Stem Cell Lineage Specification
Dennis E. Discher, PhD
Professor of Chemical & Biomolecular, Mechanical, and Bio-Engineering, University of Pennsylvania

Multiscale Approaches to Cartilage Tissue Engineering
Lawrence J. Bonassar, PhD
Associate Professor
Department of Biomedical Engineering, Cornell University

Animal Models of Mucopolysaccharidoses
Mark Haskins VMD, PhD
Professor, Pathology and Medical Genetics
School of Veterinary Medicine, University of Pennsylvania

Molecular and Cellular Mechanisms of Synovial Joint Formation During Mouse Skeletogenesis
Maurizio Pacifici, Ph.D.
Professor of Orthopaedic Surgery, Thomas Jefferson University College of Medicine

Effects of Decorin and Biglycan on Neocartilage and Cartilage Material Properties
Jack Lewis, PhD
Professor of Orthopaedic Surgery and Mechanical Engineering, University of Minnesota

Ischemia/reperfusion injury and Apoptosis of the Muscle and Skin in an Animal Model
Richard Salcido, MD
Erdman Professor and Chair of Physical Medicine and Rehabilitation
Director of Rehabilitation Services, University of Pennsylvania

Morphological and Biological Characteristics of Articular Cartilage in Osteoarthritis
Sharmila Majumdar, PhD
Director of Musculoskeletal and Quantitative Imaging Research Group
Professor of Radiology and Orthopaedic Surgery, UCSF and of Bioengineering UC Berkeley

Tuesday, January 8, 2008, 3:30-4:30pm/BRB 251
New Insights into the Pathogenesis of Achondroplasia
William Horton, PhD
Senior Investigator and Director of Research, Portland Shriners Research Center

Tuesday, December 4, 2007, 3:30-4:30pm/BRB 251
The Skeletal Consequences of Disease: Diabetes to Cancer
Larry Suva, PhD
Director, Center for Orthopaedic Research
Professor, Departments of Orthopaedic Surgery and Physiology and Biophysics, University of Arkansas for Medical Sciences

ANNUAL SCIENTIFIC SYMPOSIUM (all day event)
Wednesday, November 7, 2007, Time 8:45 am-3:45 pm/BRB Auditorium
Is the intervertebral disc a source of pain?
Gunnar Andersson, MD, PhD
Professor and Chair of Orthopaedic Surgery, Rush-Presbyterian Medical Center

Tuesday, October 9, 2007, 3:30-4:30pm/BRB 251
Molecular Mechanisms of Bone Metastasis
Katherine Weilbaecher, MD
Assistant Professor of Molecular Oncology, Washington University

Tuesday, September 18, 2007, 3:30-4:30pm/JMB Reunion 40
Understanding Growth Plate Dynamics by In Vivo Imaging Using Multiphoton Microscopy
Cornelia Farnum, DVM, PhD
Professor of Zoology, Cornell University

Visiting Professorship Series - Academic Year 2006-2007

Tuesday, May 22, 2007, 3:30-4:30pm/BRB 252
Mechanical Forces and Articular Cartilage Formation: What We Have Learned From Tissue Engineering
Rita Kandel, MD
Professor, Dept. of Laboratory Medicine and Pathobiology, University of Toronto

Tuesday, April 17, 2007, 3:30-4:30pm/BRB 252, Postponed until September 18, 2007 due to Weather
Understanding Growth Plate Dynamics by In Vivo Imaging Using Multiphoton Microscopy
Cornelia Farnum, DVM, PhD
Professor of Zoology, Cornell University

Tuesday, March 20, 2007, 3:30-4:30pm/BRB 252
The Use of Transgenic Mouse Models to Study the Hormonal Regulation of Bone Remodeling
Barbara Kream, PhD
Professor of Medicine and Genetics & Developmental Biology
Director, Medical Scientist Training Program, University of Connecticut Health Center

Tuesday, March 19, 2007, 11:00am-12:00pm/BRB 251
Gene Therapy Based on Muscle Stem Cells: Potential for Tissue Regeneration and Repair
Johnny Huard, PhD
Professor of Molecular Genetics and Biochemistry and Bioengineering, University of Pittsburgh
Tuesday, February 27, 2007, 3:30-4:30pm/BRB 252
Mechanical Signals as a Non-pharmacologic Intervention for Osteoporosis
Clinton Rubin, PhD
Distinguished Professor & Chair - Department of Biomedical Engineering
State University of New York Stony Brook

Tuesday, January 16, 2007, 3:30-4:30pm/BRB 252
Oxygen-Dependent Regulation of Bone Growth: Epiphyseal Chondrocyte Proliferation, Autophagy and Apoptosis
Irving Shapiro, PhD
Professor and Director of Orthopaedic Research, Thomas Jefferson University

Tuesday, December 19, 2006, 4:00-5:00pm/BRB 251
Using Genes to Repair Bone and Cartilage
Chris Evans, PhD
The Robert Lovett Professor of Orthopaedic Surgery, Center for Molecular Orthopaedics, Harvard Medical School

ANNUAL SCIENTIFIC SYMPOSIUM (all day event)
Wednesday, November 29, 2006, 8:00 am-3:30 pm/BRB Auditorium
Digital Humans: From Medical Images to Simulated Surgery
Scott Delp, PhD
Professor, Departments of Bioengineering, Mechanical Engineering, and Orthopaedic Surgery,
Stanford University

Wednesday, October 4, 2006, 1:00-2:00pm/BRB 251
Tendon Ageing and Regeneration – Lessons from the Racehorse
Roger K.W. Smith, MA VetMB PhD DEO DipECVS MRCVS RCVS & European Specialist in Equine Surgery
Professor of Equine Orthopaedics, The Royal Veterinary College

Tuesday, September 19, 2006, 4:00-5:00pm/JMB Class 62
Degeneration of Cartilage and Meniscus: Insights From In Vitro Model Systems
Marc Levenston, PhD
Associate Professor, George W. Woodruff School of Mechanical Engineering, Georgia Institute of Technology

Visiting Professorship Series - Academic Year 2005-2006

Tuesday, June 13, 2006/BRB 251
Biological Fixation of Soft Tissue to Bone: A Tissue Engineered Approach
Helen Lu, PhD
Assistant Professor of Biomedical Engineering, Columbia University

Tuesday, May 9, 2006/BRB 251
Linking Endochondral Skeletal Development to Hematopoiesis through Analysis of Transgenic Mouse Models
Olena Jacenko, PhD
Associate Professor of Animal Biology, University of Pennsylvania

Tuesday, April 11, 2006/BRB
New Insights into the Multisystem Pathogenesis of Marfan Syndrome
Hal Dietz, MD
Victor A. McKusick Professor of Medicine and Genetics, Johns Hopkins University

Tuesday, March 7, 2006/BRB
Developmental Paradigms for Cell-Based Tissue Engineering
Rocky S. Tuan, PhD
Branch Chief, Cartilage Biology and Orthopaedics, The National Institutes of Health
Tuesday, February 21, 2006/BRB  
Mechanics of Osteoporotic Trabecular Bone  
X. Edward Guo, PhD  
Associate Professor of Biomedical Engineering, Columbia University

Tuesday, January 17, 2006/BRB  
Molecular Motors: Smart, Soft Musculoskeletal Nano-Machines  
Yale Goldman, MD, PhD  
Director, Pennsylvania Muscle Institute  
Professor of Physiology, University of Pennsylvania

Tuesday, December 13, 2005/BRB 251  
Mechanosensitivity of Stem Cells  
Jeffrey C. Lotz, PhD  
Professor, Orthopaedic Surgery, University of California, San Francisco

Tuesday, November 8, 2005/BRB 251  
Development of Tendon Extracellular Matrix Structure and Function: Regulation by Collagen and Proteoglycan Interactions  
David E. Birk, PhD  
Professor, Department of Pathology, Anatomy & Cell Biology, Jefferson Medical College

ANNUAL SCIENTIFIC SYMPOSIUM (all day event)  
Tuesday, October 11, 2005, 8:00am-3:30pm/BRB Auditorium  
Is There Potential for Cartilage Repair?  
Linda J. Sandell, PhD  
Professor and Director of Research, Department of Orthopaedic Surgery  
Professor, Department of Cell Biology and Physiology, Washington University School of Medicine

Thursday, September 15, 2005/BRB 251  
Mechanotransduction in Tendon Cells: Implications for Rehabilitation and Overuse Injuries  
Steven P. Arnoczky, DVM  
Wade O. Brinker Endowed Professor of Veterinary Surgery  
Director, Laboratory for Comparative Orthopaedic Research, Michigan State University

Visiting Professorship Series - Academic Year 2004-2005

Tuesday, July 26, 2005/BRB 252  
Biological and Mechanical Studies of Skeletal Muscle Injury  
Richard Lieber, PhD  
Professor of Orthopaedics and Bioengineering, University of California, San Diego & V.A. Medical Centers

Tuesday, June 14, 2005/BRB 252  
Molecular MRI of Connective Tissues  
Ravinder Reddy, PhD  
Scientific Director, MMRRCC; Associate Professor, Department of Radiology, University of Pennsylvania

Tuesday, May 17, 2005/BRB 252  
Structure and Function of Decorin-based Proteoglycans in Ligament  
Jeffrey A. Weiss, PhD  
Director, Musculoskeletal Research Laboratories; Associate Professor Bioengineering, University of Utah

Tuesday, April 19, 2005/BRB 252  
Applications of Medical Imaging in Orthopedic Biomechanics and Biomechanics in Functional Tissue Engineering
Kai-Nan An, PhD
Chair, Orthopaedic Research; Co-Director, Biomechanics Laboratory, Mayo Clinic, Rochester, MN

**Tuesday, March 15, 2005/BRB 252**
*Molecular Mechanisms of Bone Repair*
Louis Gerstenfeld, PhD
Director, Musculoskeletal Research Lab; Professor of Orthopaedic Surgery & Biochemistry, Boston University

**Tuesday, February 15, 2005/BRB 252**
*Skeletal Response to in vivo Fatigue Loading*
Matthew J. Silva, PhD
Associate Professor, Orthopaedic Surgery & Biomedical Engineering, Barnes-Jewish Hospital at Washington University

**Tuesday, January 18, 2005/BRB 252**
*Magnetic Resonance Microimaging and Spectroscopy of Engineered Cartilage Tissue Developing in a Hollow-Fiber Bioreactor*
Richard Spencer, MD, PhD
Chief, Nuclear Magnetic Resonance Unit, NIH/National Institute on Aging

**Thursday, December 16, 2004/BRB 252**
*Control of Endochondral Bone Formation by Retinoids and BMPs*
Sherrill Adams, PhD
Professor and Chair, Biochemistry, School of Dental Medicine, University of Pennsylvania

**Thursday, November 11, 2004/BRB 251**
*Muscle in Health and Disease: Building Pathways using Genome-Enabled Tools*
Eric P. Hoffman, PhD
Director, Research Center for Genetic Medicine, Children’s National Medical Center

**Monday, October 18, 2004/BRB 252**
*Muscular Dystrophy: Seeing a Solution*
Tejvir S. Khurana, MD, PhD
Assistant Professor, Physiology, Pennsylvania Muscle Institute, University of Pennsylvania