

#### Visiting Professorship Series-Academic Year 2017-2018

#### Tuesday, May 8, 2018, 1:30pm – 2:30pm, CRB Austrian Auditorium

*Title: Regulation of stem cell fate through niche-derived signals and mechanical forces.* Sara Wickström, M.D., Ph.D., Associate Professor, Principle Investigator, University of Helsinki, Finland

#### Tuesday, April 24, 2018, 1:30pm – 2:30pm, CRB Austrian Auditorium

*Title: Orthopedic Applications of Gene Therapy.* Chris Evans, Ph.D., Director, Musculoskeletal Gene Therapy Research Laboratory, Mayo Clinic, Rochester

#### Tuesday, March 27, 2018, 1:30pm – 2:30pm, CRB Austrian Auditorium

*Title: Modular inductive high-density cell culture systems for engineering complex tissues.* Eben Alsberg, Ph.D. Professor of Biomedical Engineering and Orthopaedic Surgery, Director of ASCENT Lab Case Western Reserve University

#### Tuesday, February 13, 2018 1:30-2:30pm/CRB Austrian Auditorium

Notch Signaling and the Skeleton Ernesto Canalis, M.D., Professor of Orthopaedic Surgery and Medicine, Director of Center for Skeletal Research University of Connecticut

#### Tuesday, January 16, 2018 1:30-2:30pm/CRB Austrian Auditorium

Parathyroid Hormone and Related Peptides Signaling To the Nucleus of Osteoblasts. Nicola C. Partridge, Ph.D., Professor & Chair, Departments of Medicine, Biochemistry & Molecular Pharmacology, & Basic Science & Craniofacial Biology, College of Dentistry, New York University School of Medicine

#### Tuesday, December 5, 2017 1:30-2:30pm/CRB Austrian Auditorium

*Osteocytes and Bone Remodeling: They're Just Dying to Do the Job.* Mitchell B. Schaffler, Ph.D., CUNY & Wallace Coulter Distinguished Professor Of Biomedical Engineering Chairman, Department of Biomedical Engineering, The City College Of New York, City University Of New York

ANNUAL SCIENTIFIC SYMPOSIUM (All Day Event)

Wednesday, November 15, 2017, 8:00-6:30pm/BRB Auditorium Toward Bioengineering Translation

Kyriacos Athanasiou, Ph.D., Distinguished Professor, Department Of Biomedical Engineering, University Of California, Irvine

#### Tuesday, October 24, 2017, 1:30-2:30pm/CRB Austrian Auditorium

How Can We Improve Translation Of Pre-Clinical Osteoarthritis Research To Patients? Christopher Little, B.V.M.S., Ph.D., Director, Raymond Purves Bone & Joint, Research Laboratories, Kolling Institute, Institute of Bone & Joint Research, University Of Sydney

#### Tuesday, September 12, 2017, 1:30-2:30pm/CRB Austrian Auditorium

Cartilage Repair and Osteoarthritis in Genetic Mouse Models Linda Sandell, Ph.D., Mildred B. Simon Research Professor & Director of Research, Washington University

#### Visiting Professorship Series-Academic Year 2016-2017

# Tuesday, June 2017 1:30-2:30pm/CRB Austrian Auditorium

### **CANCELLED Rescheduled To December 2017**

*Osteocytes and Bone Remodeling: They're Just Dying to Do the Job.* Mitchell B. Schaffler, Ph.D., CUNY and Wallace Coulter Distinguished Professor Of Biomedical Engineering Chairman, Department Of Biomedical Engineering, The City College Of New York, City University Of New York

#### Tuesday, May 2017, 1:30-2:30pm/CRB Austrian Auditorium

*NF-Kb Signaling In Muscle Growth and Disease* Denis C. Guttridge, Ph.D., Professor, Department Of Cancer Cachexia & Genetics and Director, Research & Management for Cancer Cachexia, Ohio State University

### Tuesday, April 4, 2017, 1:30-2:30pm/CRB Austrian Auditorium

*MSC's and Immunomodulation: Are We Moving Closer to Allogeneic Use?* Laurie Goodrich, D.V.M., Ph.D, Associate Professor of Orthopaedics, Department of Clinical Sciences Colorado State University

#### Tuesday, March 14, 2017, 1:30-2:30pm/CRB Austrian Auditorium CANCELLED Rescheduled To September 2017

Cartilage Repair and Osteoarthritis in Genetic Mouse Models Linda Sandell, Ph.D., Mildred B. Simon Research Professor & Director of Research, Washington University

### Tuesday, February 7, 2017, 1:30-2:30pm/CRB Austrian Auditorium

Cell-Independent Manipulation of Bone Matrix Properties: A Novel Treatment Strategy for Osteoporosis & Type 2 Diabetes.

David Burr, Ph.D, Professor of Anatomy & Cell Biology, Professor, Department Of Biomedical Engineering Indiana University

### Tuesday, January 10, 2017, 1:30-2:30pm/CRB Austrian Auditorium

Studying Bone As A Complex Adaptive System Reveals Inter-Individual Differences In Skeletal Growth and Aging. Karl Jepsen, Ph.D., Professor, Associate Chair of Research, Department of Orthopaedic Surgery, University Of Michigan

# Tuesday, December 13, 2016, 1:30-2:30pm/JMB Class Of '62 Auditorium

#### **CANCELLED Rescheduled To June 2017**

Mitchell B. Schaffler, Ph.D., CUNY and Wallace Coulter Distinguished Professor Of Biomedical Engineering Chairman, Department Of Biomedical Engineering, The City College Of New York, City University Of New York

### ANNUAL SCIENTIFIC SYMPOSIUM (All Day Event)

#### Wednesday, November 9, 2016, 9:00-5:30pm/BRB Auditorium

*Strategies for Improving Bone Properties in Patients with Osteogenesis Imperfecta* Matthew Warman, M.D., Professor, Department Of Genetics, Harvard Medical School

### Tuesday, October 25, 2016, 1:30-2:30pm/JMB Class Of '62 Auditorium

Musculoskeletal Adaptation To Space Flight. Henry J. Donahue, Ph.D., Professor & Chair, Department Of Biomedical Engineering, Virginia Commonwealth University, Richmond

### Tuesday, September 20, 2016, 1:30-2:30pm/JMB Class Of '62 Auditorium

*Mechanisms of Chondroprotection By TGF-β.* Rosa A. Serra, Ph.D., Professor, Department Of Cell, Developmental & Integrative Biology, University of Alabama at Birmingham

#### 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 & 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 and 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, Ph.D., Professor of Biomedical Engineering and Professor of Orthopaedics, University Of Rochester

### Tuesday, February 16, 2016, 1:30-2:30pm/ CRB Austrian Auditorium

*Unravelling The Neurobiology Of Osteoarthritis Pain* Anna-Marie Malfait, M.D., Ph.D., Associate Professor Of Medicine & Biochemistry, Rush University Medical Center

### Tuesday, January 19, 2016, 1:30-2:30pm/ CRB Austrian Auditorium

Role Of Connexin43 In Cortical Bone Adaptation To Mechanical Load Roberto Civitelli, M.D., Ph.D., 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, Ph.D., 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"

### Nancy Lane, M.D., Director, Center for Musculoskeletal Health, UC Davis Health System

## Tuesday, October 20, 2015, 1:30-2:30pm/8-146 SCTR

A Runted Tale of Skeletal Homeostasis and Repair M. Hicham Drissi, Ph.D., Professor of Orthopaedic Surgery, UConn Health

### Tuesday, September 8, 2015, 1:30-2:30pm/8-146 SCTR

*Title: Evolving Roles Of Prolyl Hydroxylases In Intervertebral Disc Health and Disease* Markarand V. Risbud, Ph.D., Professor of Orthopaedic Surgery; Director, Spine Research Program Sidney Kimmel Medical College, Thomas Jefferson University

### 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, Ph.D., Professor of Orthopaedics & Associate Director of the Center for Musculoskeletal Research University Of Rochester, Rochester, NY

### Tuesday, June 23, 2015, 1:30-2:30pm/BRB 252 PCM.D.-PCI Industrial Interaction Seminars

Working With The Penn Center For Innovation To Protect and Commercialize Your Research. Viviane Martin, Ph.D., Director, PSOM Licensing Group, Penn Center for Innovation Sarah Frew, MBA, Director, Corporate Contracts & 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, Ph.D., 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, Ph.D., Professor Of Oral & 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, Ph.D., Professor Of Orthopedic Surgery & Biochemistry & 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, Ph.D., 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, M.D., Ph.D., 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, Ph.D., 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, Ph.D., Chief Of The Molecular Biology Of Bones & 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. Kortenberg, M.D., 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, Ph.D., William K. & 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, Ph.D., 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 and Symptom Modifying Therapies For Painful Disc Degeneration James C. Iatridis, Ph.D., Professor & 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 & 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 & Musculoskeletal & 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 & 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 & 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, D.V.M., 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 & 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 & 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 & 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 & 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. & 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 & Chair, Department Of Anatomy & 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 & Sports Medicine & 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 & Chief Scientific Officer, Hospital For Special Surgery & 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 & 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 & 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 & 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 & Developmental Biology, Oregon Health & 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 Yaszemski, M.D., Ph.D., Professor Of Orthopaedics & Bioengineering, & The Director Of The Tissue Engineering & 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, Ph.D., 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 & 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, M.D., 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 & 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 and 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 & Vice Chair For Research and Director, Division Of Musculoskeletal Sciences

Director, Department Of Orthopaedics & 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 & Clinical Associate Orthopaedic Surgeon, Children's Hospital & 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 & 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 & Chair Of Oral & 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 & 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, M.D., Ph.D.– Cancelled Attending Orthopaedic Surgeon & 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 Ph.D., Professor Of Biomedical Engineering President Of Flexcell International Corp, North Carolina State University & University Of North Carolina Chapel Hill

#### Tuesday, March 3, 2009, 1:00-2:00 Pm/BRB 251

Gene: Environment Interaction In Osteoarthritis Joanne Jordan, M.D., MPH, Director, Thurston Arthritis Research Center Chief, Division Of Rheumatology, Allergy, & 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, Ph.D., Professor Of Cell & Tissue Engineering, Queen Mary University Of London

Tuesday, February 3, 2009, 1:00-2:00pm/BRB 251

*Bmps Mediate Bone Homeostasis* Vicki Rosen, Ph.D., Professor & 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, M.D., Ph.D. Rescheduled May 5

Attending Orthopaedic Surgeon & Director Of Orthopaedic Research, Hospital For Special Surgery, New York

#### Tuesday, December 9, 2008, 1:00-2:00pm/BRB 253

Quantitative Assessment Of Bone By Radiologic Methods Thomas N. Hangartner, Ph.D., 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, Ph.D., Ormandy Professor & Director Of Orthopaedic Research, Duke University

Tuesday, October 7, 2008, 1:00-2:00pm/CRB Austrian Auditorium Albert J. Banes Ph.D. Rescheduled Apr. 21 Professor Of Biomedical Engineering President Of Flexcell International Corp North Carolina State University & University Of North Carolina Chapel Hill *Matrix Elasticity Directs Stem Cell Lineage Specification* Dennis E. Discher, Ph.D., Professor Of Chemical & Biomolecular, Mechanical, & Bio- Engineering, University Of Pennsylvania

### Tuesday, September 9, 2008, 1:00-2:00pm/BRB 253

Multiscale Approaches To Cartilage Tissue Engineering Lawrence J. Bonassar, Ph.D., Associate Professor, Department Of Biomedical Engineering, Cornell University

### Visiting Professorship Series-Academic Year 2007-2008

### Thursday, June 5, 2008, 3:30-4:30 Pm/BRB 252

Animal Models Of Mucopolysaccharidoses Mark Haskins VM.D., Ph.D., Professor, Pathology & Medical Genetics, School Of Veterinary Medicine, University Of Pennsylvania

#### Tuesday, May 6, 2008, 3:30-4:30pm/BRB 252

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

### Tuesday, April 8, 2008, 3:30-4:30pm/BRB 251

Effects Of Decorin and Biglycan On Neocartilage and Cartilage Material Properties Jack Lewis, Ph.D., Professor Of Orthopaedic Surgery & Mechanical Engineering, University Of Minnesota

### Tuesday, March 11, 2008, 3:30-4:30 Pm/BRB 251

*Ischemia/Reperfusion Injury and Apoptosis Of The Muscle and Skin In An Animal Model* Richard Salcido, M.D., Erdman Professor & Chair Of Physical Medicine & Rehabilitation Director Of Rehabilitation Services, University Of Pennsylvania

### Tuesday, February 5, 2008, 3:30-4:30pm/BRB 251

Morphological and Biological Characteristics Of Articular Cartilage In Osteoarthritis Sharmila MajuM.D.ar, Ph.D., Director Of Musculoskeletal & Quantitative Imaging Research Group Professor Of Radiology & Orthopaedic Surgery, UCSF & Of Bioengineering UC Berkeley

### Tuesday, January 8, 2008, 3:30-4:30pm/BRB 251

New Insights Into The Pathogenesis Of Achondroplasia William Horton, Ph.D., Senior Investigator & 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, Ph.D., Director, Center For Orthopaedic Research Professor, Departments Of Orthopaedic Surgery & Physiology & 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, M.D., Ph.D., Professor & 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, M.D., 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, D.V.M., Ph.D., 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, M.D., Professor, Dept. Of Laboratory Medicine & 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, D.V.M., Ph.D., 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, Ph.D., Professor Of Medicine & 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, Ph.D., Professor Of Molecular Genetics & Biochemistry & 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, Ph.D., 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, Ph.D., Professor & 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, Ph.D., 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, Ph.D., Professor, Departments Of Bioengineering, Mechanical Engineering, & 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 Ph.D. 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, Ph.D., 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, Ph.D., 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, Ph.D., Associate Professor Of Animal Biology University Of Pennsylvania

# Tuesday, April 11, 2006/BRB

New Insights Into The Multisystem Pathogenesis Of Marfan Syndrome Hal Dietz, M.D., Victor A. Mckusick Professor Of Medicine & Genetics Johns Hopkins University

## Tuesday, March 7, 2006/BRB

Developmental Paradigms For Cell-Based Tissue Engineering Rocky S. Tuan, Ph.D., Branch Chief, Cartilage Biology & Orthopaedics The National Institutes Of Health

# Tuesday, February 21, 2006/BRB

Mechanics Of Osteoporotic Trabecular Bone X. Edward Guo, Ph.D., Associate Professor Of Biomedical Engineering Columbia University

# Tuesday, January 17, 2006/BRB

Molecular Motors: Smart, Soft Musculoskeletal Nano-Machines Yale Goldman, M.D., Ph.D., Director, Pennsylvania Muscle Institute Professor of Physiology, University Of Pennsylvania

# Tuesday, December 13, 2005/BRB 251

Mechanosensitivity Of Stem Cells Jeffrey C. Lotz, Ph.D., 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, Ph.D., 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, Ph.D.

#### Professor & Director Of Research, Department Of Orthopaedic Surgery Professor, Department Of Cell Biology & 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, D.V.M., 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, Ph.D., Professor of Orthopaedics & Bioengineering University Of California, San Diego & V.A. Medical Centers

#### Tuesday, June 14, 2005/BRB 252

Molecular MRI Of Connective Tissues Ravinder Reddy, Ph.D., 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, Ph.D., 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, Ph.D., Chair, Orthopaedic Research; Co-Director, Biomechanics Laboratory Mayo Clinic, Rochester, MN

#### Tuesday, March 15, 2005/BRB 252

Molecular Mechanisms Of Bone Repair Louis Gerstenfeld, Ph.D., 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, Ph.D., 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, M.D., Ph.D., 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, Ph.D., Professor & 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, Ph.D., 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, M.D., Ph.D., Assistant Professor, Physiology, Pennsylvania Muscle Institute University Of Pennsylvania