University of Connecticut Health Center
New England Musculoskeletal Institute

5th Annual Research Day

Edmund and Arlene Grossman Auditorium
Cell and Genome Sciences Building
400 Farmington Ave
Farmington, CT

- June 10, 2011 -

Program

Introduction

8:45-9:00	Welcome & Introduction	Jay R. Lieberman, M.D., Director, New England Musculoskeletal Institute; Professor & Chairman of Orthopaedic Surgery Hicham Drissi, Ph.D., Director of Orthopaedic Research

Cell and Tissue Biology

Moderators: Marc Lalande, Ph.D., Barbara Kream, Ph.D.

9:00-9:15	Characterization of osteoclast precursors derived from hES cells	Leonardo Aguila, Ph.D., Associate Professor of Immunology, UCHC
9:15-9:20	Questions & Discussion	
9:20-9:35	Distinct roles of Cbl and Cbl-b in Osteoclast Biology	Archana Sanjay, Ph.D., Assistant Professor of Orthopaedics, UCHC
9:35-9:40	Questions & Discussion	
9:40-9:55	Notch Inhibits Nuclear Factor of Activated T-Cells Transactivation in Primary Epiphyseal Chondrocytes	Stefano Zanotti, Ph.D., Research Assistant Professor of Medicine, St. Francis Hospital
9:55-10:00	Questions & Discussion	
10:00-10:15	Differentiation of iPS cells into an articular cartilage like phenotype	Rosa Guzzo, Ph.D., Senior Research Scientist, Department of Orthopaedics, UCHC
10:15-10:20	Questions & Discussion	
10:20-10:30	Break	Setup of next session

Tissue Regeneration & Repair

Moderators: Doug Adams, Ph.D., Jon Goldberg, Ph.D.

10:30-10:45	Osteoconductive biomaterials for bone regeneration.	Mei Wei,Ph.D., Associate Professor of Biomedical Engineering, UConn/Storrs
10:45-10:50	Questions & Discussion	
10:50-11:05	Injectable lactoferrin gel as novel osteogenic biomaterial	Lakshmi Nair, Ph.D., Assistant Professor of Orthopaedics, UCHC
11:05-11:10	Questions & Discussion	
11:10-11:25	*In vivo* fate mapping identifies mesenchymal progenitor cells during physiological bone remodeling and repair	Ivo Kalajzic, M.D., Ph.D., Assistant Professor, Center for Regenerative Medicine, UCHC
11:25-11:30	Questions & Discussion	
11:30-11:45	Enhanced calvarial defect healing in transgenic mice overexpressing an anabolic isoform of FGF2 in osteoblasts	Liping Xiao, M.D., Ph.D.; Senior Research Scientist, Department of Medicine, UCHC
11:45-11:50	Questions & Discussion	

11:50-12:50	LUNCH and Poster Viewing Session	Food Court* *Food and beverages are NOT allowed in the auditorium. Posters located in lobby.
1:00-1:50	Keynote Speaker's Talk: Wolff's Law, Lrp5, and the local regulation of bone mass	Matthew Warman, M.D., Professor of Genetics and Orthopaedic Surgery; Director of Orthopaedic Research Laboratories, Boston Children's Hospital, Boston, MA
1:50-2:00	Questions & Discussion	

Clinical & Translational Sciences

Moderator: Joe Lorenzo, M.D., Carol Pilbeam, M.D.

2:05-2:20	Genetics of hyperparathyroidism	Andrew Arnold, M.D., Professor of Medicine; Director, Center for Molecular Medicine, UCHC
2:20-2:25	Questions & Discussion	
2:25-2:40	Arthroplasty and frailty	Gregory Polkowski, M.D., Assistant Professor of Orthopaedics, UCHC
2:40-2:45	Questions & Discussion	
2:45-3:00	Novel anabolic therapies for osteoporosis	Ernesto Canalis, M.D., Professor of Medicine; Director of Research, St. Francis Hospital
3:00-3:05	Questions & Discussion	
3:05-3:15	"Same Day" regional gene therapy: A novel strategy to enhance bone repair	Mandeep Virk, M.D., Orthopaedic Resident, UCHC
3:15-3:20	Questions & Discussion	
3:20-3:30	Break	Setup of next session

Multidisciplinary Interactions and Resources

Moderator: David Rowe, M.D., Yusuf Khan, Ph.D.

3:30-3:45	Aptamer-functionalized hydrogels for controlling protein release at will	Yong Wang, Ph.D., Assistant Professor of Engineering, UConn/Storrs
3:45-3:50	Questions & Discussion	
3:50-4:05	Chemical control of protein secretion: Novel technology and applications	Uday Khire, Ph.D., Cheminpharma, 400 Farmington Avenue
4:05-4:10	Questions & Discussion	
4:10-4:25	3-D optical probing of cellular interactions with nanoscale materials and deformations	Brian Huey, Ph.D., UConn/Storrs
4:25-4:30	Questions & Discussion	

4:30-4:45	2-photon imaging of cells and scaffolds for bone regeneration	Max Villa, Ph.D., Research Scientist, UConn/Storrs
4:45-4:50	Questions & Discussion	

4:50-5:00	Closing remarks	
5:00-6:00	Wine and cheese	400 Farmington Avenue, Lobby