2nd Annual Musculoskeletal Winter Symposium

The 2nd Annual Musculoskeletal Winter Symposium was held on Thursday, February 2, 2012. The Annual Symposium is the largest and most extensive interaction of the CMR Research Base investigators. It was a half day symposium featuring talks (overview of the Center and P&F updates), two poster sessions (including work from all laboratories) and two featured speakers. Again this year, the Symposium was a great success, bringing colleagues together to share their work with one another and foster new collaborations. Approximately 100 people attended the Symposium, and there were 48 abstract submissions. Of those 48 abstract submissions, four were chosen for oral presentations and three were winners of poster prizes.

We would like to thank everyone that attended the Symposium. Your support of the Center is its driving force. Please plan to attend next year’s Symposium (TBA), and continue all of the wonderful work that was showcased this year!
Special Presentations

Gerard Karsenty, MD, PhD
“Whole-Organism Physiology and the Skeleton: Bone Mass and Beyond”

Dr. Karsenty received his M.D. and Ph.D. from the University of Paris, France and completed his post-doctoral training at the University of Texas MD Anderson Cancer Center in 1990. His laboratory has studied every aspect of skeletal biology ranging from cell differentiation to function. The overarching assumption of his current work is that the appearance of bone during evolution has changed profoundly the physiology of animals because of the energetic cost that bone modeling and remodeling entails. Thus his group has explored in the last 10 years the hypothesis that the control of bone mass and energy metabolism must be coordinated and that this coordination is done in large part by hormones like leptin and osteocalcin that appear during evolution with bone. His lab has explored through genetic and molecular means every aspect of this hypothesis. The Karsenty lab is exploring whether there are additional connections between bone physiology and the function of other organs such as fertility. Dr. Karsenty is the recipient of several awards.

Conrad Weihl, MD, PhD
“Autophagy in Musculoskeletal Health and Disease”

Dr. Weihl is currently an Assistant Professor in Neurology, Adult Neurology Division. Dr. Weihl’s current research focus is mechanisms of weakness and atrophy related to neuromuscular disorders including muscular dystrophy, inflammatory myopathy (including inclusion body myositis), myopathy, motor neuron disease, ALS - Lou Gehrig’s disease, statin induced myopathy, and elevated CPK.

Oral Presentations (Top 4 Abstract Submissions)

Chang Yang (Novack Lab)
“IAP Antagonist BV6 Increases Bone Metastasis via NIK-Mediated Osteoclast Activation”

Kannan Karuppaiah (Abu-Amer Lab)
“Ablation of TGF-b Activated Kinase-1 in the Myeloid Lineage Leads to Osteopetrosis”

Corinne Decker (Faccio Lab)
“TMEM178 is a Novel Negative Regulator of Inflammatory Cytokine Production and Osteoclastogenesis”

Ryan Tomlinson (Silva Lab)
“Osteogenic Response to Damaging Mechanical Loading Is Diminished by Inhibition of Angiogenesis”

Poster Winners

Viviana Cremasco (Orthopaedic Surgery – Faccio Lab)
“PKCd Deficiency Perturbs Bone Homeostasis by Impairing Exocytosis of Discrete Lysosomal Vesicles.”

Debabrata Patra (Orthopaedic Surgery—Sandell Lab)
“Site-1 protease is essential to growth plate maintenance and is a critical regulator of chondrocyte hypertrophic differentiation in postnatal mice.”

Annie Schwartz (Orthopaedic Surgery—Thomopoulos Lab)
“The Development of a Functional Enthesis is Driven by Stress Concentrations at the Tendon-to-Bone Interface.”
The Department of Orthopaedic Surgery and the Department of Internal Medicine, Division of Bone & Mineral Disease, have joined forces in the BJC Institute of Health building, forming the nucleus of the Musculoskeletal Research Center.

The official opening will be **May 23, 2012** from 3-6pm. Please plan to join us!