Summer Educational Series

This year the Musculoskeletal Research Center will sponsor a summer educational series. This series will take place each Friday in July at 9am on the 11th floor of the BJCIH building, in the A/B conference room. The topics and speakers are:

“Use of Live Cell Imaging in Research”  
Tom Broekelmann (left) and Bob Mecham (right), Cell Biology

“Functional Biomechanical Testing”  
Matt Silva, Orthopaedic Surgery

“Preparation and Use of rtTA (reverse tetracycline transactivator) Technology for Gene Targeting in Mice”  
Fanxin Long, Medicine

“Preparation of Great Mouse Constructs for Targeted Deletion and Insertion”  
Renate Lewis, Neurology

For more information about the MRC and the Cores, please click here: [http://musculoskeletalcore.wustl.edu](http://musculoskeletalcore.wustl.edu)
**Establishing A Novel Genetic Model System to Elucidate Conserved Mechanisms Controlling Adult Muscle Stem Cells**

The goal of this investigation is to establish an experimental model to study stem cell-based control of adult muscle homeostasis in the genetically tractable system, *Drosophila melanogaster*. Many of the key cellular, molecular and physiological hallmarks of muscle biology are conserved between invertebrates and mammals (Augustin and Partridge, 2009). Therefore, if successful, this pilot study will pave the way for subsequent identification of conserved genes controlling the process of adult muscle homeostasis in vivo, using the unsurpassed molecular genetic screening methodologies available only in the fruit fly.

---

**ASXL Proteins Regulate Bone Resorption**

The specific aim of this investigation is to determine the effects of ASXL1 deletion on basal and PPARγ-mediated osteoclast formation and function in vitro and in vivo. Rosiglitizone (BRL) is an insulin-sensitizing drug which exerts its effect by activating the transcription factor PPARγ. While BRL is probably the most effective oral treatment of type II diabetes mellitus (DM II) it carries complications including increased fracture risk. This predisposition to fracture is consistent with the fact that PPARγ preferentially promotes formation of adipocytes at the cost of osteoblasts.

---

**Core B Fee Increases**

To cover our operating costs for Core B, we have increased the rates for two of our services. Scanning on the VivaCT scanner is increased from $40 to $50/hr. CT technician time is increased from $30 to $40/hr. As before, MRC members receive a 50% discount on these rates.

---

**You are invited...**

Musculoskeletal Research Center

Grand Opening

May 23, 2012

3—6pm

BJCIH Building | 11th Floor