



MUSCULOSKELETAL  
RESEARCH CENTER  
at Washington University



WORK WITH THE BEST  
TO GET THE BEST RESULTS

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## 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*

## Avioli Musculoskeletal Seminar Series

Fridays @ 9am  
BJCIH 11th flr| A/B conf. rm.

- 5/04 Keith Hruska, MD  
*Pediatrics*
- 5/11 Sheila Stewart, PhD  
*Cell Biology & Physiology*
- 5/18 Linda Sandell, PhD  
*Orthopaedic Surgery*
- 5/25 Alice Huang, PhD  
*Shriners Hospital, OR*
- 6/01 Takashi Izawa, DDS, PhD  
*Teitelbaum Lab,  
Pathology & Immunology*

For more information about the MRC and the Cores, please click here:

<http://musculoskeletalcore.wustl.edu>

Remember to include reference to support from the Musculoskeletal Research Center in your abstracts and publications.

**Cite Grant # P30AR057235**

from the National Institute Of Arthritis And Musculoskeletal And Skin Diseases.

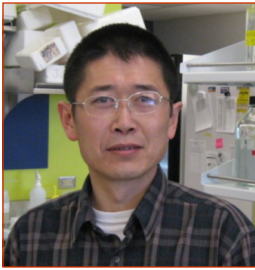
## 2012 Pilot & Feasibility Recipients



**Dr. Craig Micchelli, PhD**  
*Assistant Professor*  
 Department of Developmental Biology

### 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.



**Dr. Wei Zou, MD, PhD**  
*Research Assistant Professor*  
 Department of Pathology & Immunology

### ASXL Proteins Regulate Bone Resorption

The specific aim of this investigation is to determine the effects of ASXL1 deletion on basal and PPAR $\gamma$ -mediated osteoclast formation and function *in vitro* and *in vivo*. Rosiglitazone (BRL) is an insulin-sensitizing drug which exerts its effect by activating the transcription factor PPAR $\gamma$ . 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 PPAR $\gamma$  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.



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*You are invited...*

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**Musculoskeletal Research Center**

*Grand Opening*

May 23, 2012  
 3—6pm

BJCIH Building | 11th Floor

MUSCULOSKELETAL  
 RESEARCH CENTER  
 at Washington University

If you have any questions regarding the CMR, please contact:

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