MUSCULOSKELETAL RESEARCH CENTER

http://muscoloskeletalcore.wustl.edu

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MUSCULOSKELETAL RESEARCH CENTER at Washington University

contents

Skeletal Biology Mini-Course

Selected Fridays @ 9am
BJCIH Bldg. | 11th flr
A/B Conf. Rm.

DATE	SPEAKER
8/12	**Deborah Novack, MD, PhD** *Bone & Mineral Diseases* "Bone Resorption"
8/19	**Fanxin Long, PhD** *Orthopaedic Surgery* "Bone Formation"
9/2	**Farshid Guilak, PhD** *Orthopaedic Surgery* "Mechanosensing"
9/9	**Dan Link, MD** *Oncology* "Mesenchymal Stem Cells and Lineage Tracing"
9/23	**Clarissa Craft, PhD** *Bone & Mineral Diseases* "Matric Biology and Signaling"
9/30	**M. Farooq Rai, PhD** *Orthopaedic Surgery* "Joint Biology"

Just In Time Program

Applications for Just In Time funding will be accepted earlier this year! Applications for the second round of Just In Time funding will be due **July 15, 2016**. Applicants may apply for up to $3,000 to support use of the MRC Cores. Please visit our website for more information and to download the application form:

http://www.musculoskeletalcore.wustl.edu/content/Core/3035/A-Administrative-Core/Services/Just-In-Time-Funding.aspx

Save the DATE

We are excited to announce that the Musculoskeletal Research Center and the Center for Regenerative Medicine will sponsor a joint meeting on Musculoskeletal Regenerative Medicine and Biology to be held at Washington University on May 4-6, 2017. Details to follow, but please mark your calenders!

2016 Summer Educational Series

See page 2 for MRC 2016 Summer Educational Series Schedule

Please 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.

Research Highlight

2016 Summer Educational Series

Selected Fridays @ 9am

BJCIH Bldg. | 11th flr | A/B Conf. Rm.

DATE	SPEAKER
6/24	**David Ornitz, MD, PhD** (*Dev elopmental Biology*) *"Mouse Engineering Technology"* **Shondra Miller, PhD** (*Genetics*) *"A CRISPR Look at Genome Editing: Lessons Learned from over 1000 Editing Projects"*
7/15	**Deborah Novack, MD, PhD** (*Bone & Mineral Diseases*) **Erica Scheller, DDS, PhD** (*Bone & Mineral Diseases*) *"Bone Histomorphometry, an Interactive Introduction."*
7/22	**Elisha Roberson, PhD** (*Rheumatology*) *(see highlight below)* *"Beyond Standard of Care: Personalizing Medicine with Genomics"*
7/29	**Matthew Silva, PhD** (*Orthopaedic Surgery*) *"Using Bone Imaging and Mechanical Testing for Skeletal Phenotyping"*
8/26	**James Fitzpatrick, PhD** (*Neuroscience and Cell Biology & Physiology*) *(see highlight on right)* *"Center for Cellular Imaging: Correlative Light and 3D Electron Microscopy"*

Elisha Roberson, PhD

Instructor in Medicine

Department of Rheumatology

Dr. Roberson is an Instructor of Medicine and Genetics in the Department of Internal Medicine's Division of Rheumatology, and is co-director of the Rheumatic Disease Core Center's Human Genetics and Bioinformatics facility (NIAMS P30). He has expertise in human genetics, biostatistics, and bioinformatics. Coming from a background enriched for both bench research and computational biology, his lab focuses on the development of novel next-generation sequencing methods and their application to clinical samples for the development of personalized therapeutics. They have previously identified causative rare genetic variants in psoriasis, uveal melanoma, and familial paroxysmal kinesigenic dyskinesia, and rare variants that increase risk of Age-related Macular Degeneration (AMD). Importantly for this project, in the last 1.5 years his lab has been focusing on the use of RNA-Seq from peripheral blood cells and patient tissues to identify patient subgroups and their associated disrupted molecular pathways, generating >120 RNA-Seq libraries and >130 billion base pairs of sequence data. He will oversee the generation of all RNA-Seq libraries from human tissues, and supervise the analysis of targeted pathways as well as the global differential gene expression.

James Fitzpatrick, PhD

Scientific Director, Center for Cellular Imaging

Associate Professor

Neuroscience and Cell Biology & Physiology

Dr. Fitzpatrick is the inaugural scientific director of the Washington University Center for Cellular Imaging (WUCCI) and an associate professor of Cell Biology and Physiology and Neuroscience in the School of Medicine. Fitzpatrick completed his doctoral research in chemical physics and laser spectroscopy at the University of Bristol in the United Kingdom and completed further post-doctoral training at the University of Pittsburgh and Carnegie Mellon University.

While at Carnegie Mellon, he served as a principal team member of the National Technology Center for Networks and Pathways whose mandate was to develop fluorescent biosensors along with new imaging and informatics approaches to study signaling in living cells and tissues.

At Washington University in St. Louis, his primary research interests lie in the integration and application of multi-scale optical and charged-particle imaging technologies. Specifically, the biological applications of ion microscopy, the development of correlative light and electron microscopy approaches, and new computational tools to visualize and manipulate large -scale multidimensional data sets. All with the aim to study the structure and function of biological systems from in vitro cell cultures to developing organisms.

Core A - Administration

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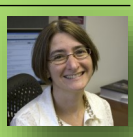
Core C - Histology



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Core D- Animal Models

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If you have any questions regarding the MRC, contact:

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