



Comparative Orthopaedic Lab

"Finding a joint solution"

<http://www.columc.com/>

Current Projects

- Sensory Function of the ACL
- BioCartilage versus Marrow Stimulation
- Rotator Cuff Allograft Transplantation
- Validation of ECHON Osteochondral Implants
- Bioreactor for Disc Disease Modeling
- Improving OCA Implantation Instruments
- Early Diagnosis of Hip Dysplasia
- Multi-Ligament Knee Reconstruction
- Biomaterial Joint Resurfacing
- Meniscal Tissue Engineering
- Novel Nutraceutical for OA
- Biomarkers for Osteoarthritis

Last quarter's "top 5"

1. Mizzou Orthopaedics Team has 17 papers accepted for presentation at ORS 2015
2. Five COL students receive travel awards to allow for presentation of their research
3. Niki Walden receives the Clough Scholarship and Outstanding Junior Award in Biology
4. Farrah Monibi and James Stannard were inducted into the Phi Kappa Phi Honor Society
5. Five COL students present their research at Mizzou Life Sciences Week

15th Annual Comparative Orthopaedics Day

Friday, April 10th at The Missouri Orthopaedic Institute

Sponsored by The Littlejohn Family Endowment

Comparative Orthopaedics Day 2015 was another outstanding day of world-class presentations, dissemination of knowledge, developing collaborations, and fun. **Dr. Arleigh Reynolds** served as our 2015 Littlejohn Family Keynote Lecturer, and gave an exceptional and inspiring address entitled "*Comparative Performance Conditioning and Injury Prevention: The Role of Periodization*" to the audience of more than 130 attendees. Dr. Reynolds presentation featured amazing stories of his successes in training world-champion sled dog teams that related to training and care of our human athletes as well.



Dr. Bob & Mrs. Marilyn Littlejohn represented the **Littlejohn Family** at Comparative Orthopaedics Day again this year. Their support allows us to bring in outstanding, world-renowned speakers each year to highlight this wonderful part of our orthopaedic research program at Mizzou. Our greatest thanks to this incredible family!



Recent Pubs

1. Cook JL, et al. A canine hybrid double-bundle model for study of arthroscopic ACL reconstruction. J Orthop Res 2015
2. Bozynski CC, et al. Evaluation of partial transection versus synovial debridement of the ACL as novel canine models. J Knee Surg 2015
3. Sherman SL, et al. In vivo toxicity of local anesthetics and corticosteroids on chondrocytes and synoviocytes. Cartilage 2015
4. Roach BL, et al. Fabrication of tissue engineered osteochondral grafts for restoring the articular surface of joints. Methods 2015
5. Roller BL, et al. Characterization of meniscal pathology using molecular and proteomic analyses. J Knee Surg 2015
6. Nuelle, et al. Posterior single-incision harvest for semitendinosus ACL graft harvest. Arthroscopy 2015
7. Roller BL, et al. Identification of synovial fluid biomarkers associated with meniscal pathology. J Knee Surg 2015