



# Comparative Orthopaedic Lab

## "Finding a joint solution"

www.columc.missouri.edu

### **Current Projects**

- Cartilage Preservation During Surgery
- Fresh Meniscus-OCA Grafts
- •Monitoring Meniscal Health with Ultrasound
- ·Biomarkers for Osteoarthritis
- •Hypercholesterolemia and Joint Health
- Improving OCA Implantation Instruments
- •Early Diagnosis of CCL Disease
- Models for Disc Degeneration
- In vitro Model of Traumatic Arthritis
- Safety Testing for Joint Injections
- •Epidural vs Regional Pain Control
- Biologic Total Joint Arthroplasty

### Last quarter's "top 5"

- 1. Dr. Pfeiffer and team receive two Coulter Foundation Program Awards!
- 2. The new and improved COL website is unveiled www.columc.com
- 3. Dr. Kuroki presents ground-breaking work at OARSI World Congress
- 4. COL Team gives 6 presentations at Phi Zeta Day
- 5. Dr. Meghan Ritzo wins first place presentation award at Phi Zeta Day for COL research

#### 13th Annual Comparative Orthopaedics Day

Dr. Tim Hewett gave an outstanding keynote address as our 2013 Littlejohn Family Lecturer covering his life-changing research into prevention of ACL injuries. More than 100 attendees comprised of physicians, veterinarians, engineers, basic scientists, physical therapists, athletic trainers, nurses, and students were treated to Dr. Hewett's inspiring talk, followed by excellent presentations from Mizzou clinicians and researchers. This year's Comparative Orthopaedics Day lived up to the world class quality we have come to expect from this event and we plan to expand it even further for 2014.



Dr. Tim Hewett with Dr. & Mrs. Littlejohn

### 2013 COL Making a Difference Award

In recognition of the dedication and effort shown in helping to advance research in The COL in order to improve the quality of life for humans and animals, we presented **Dr. Robert & Mrs. Marilyn Littlejohn** with the **2013 Making a Difference Award**. The support, encouragement, and inspiration they have provided have been integral in our success.

#### Recent Pubs

- 1. Garrity JT, et al. Improved osteochondral allograft preservation using serum-free media at body temperature. Am J Sports Med 2012
- 2. Gregory MH, et al. A review of translational animal models for knee osteoarthritis. Arthritis 2012
- 3. Franklin SP, et al. Outcomes associated with treatments for shoulder instability in dogs. Vet Surg 2013
- 4. Christopher SA, et al. Comparison of long term outcomes associated with 3 treatments for CCLD in dogs, Vet Surg 2013
- 5. Garner BC, et al. Expression of proteins in serum, synovial fluid, synovial membrane and cartilage from dogs with OA. AJVR 2013
- 6. O' Connell GD, et al. Toward engineering a biologic al joint replacement. J Knee Surg 2012
- 7. Stoker AM, et al. Improved preservation of fresh osteochondral allografts for clinical use. J Knee Surg 2012
- 8. Stylianou AP, et al. Development and validation of a multi-body model of the canine stifle joint. Comp Meth Biomech, Biomed Eng 2012
- 9. Smith MJ, et al. Novel bone-tendon allograft for repair of chronic large rotator cuff tears using a canine model. Arthroscopy 2012
- 10. Garner BC, et al. Using animal models in osteoarthritis biomarker research. J Knee Surg 2011