



e-news

Comparative Orthopaedic Lab

"Finding a joint solution"

www.columc.missouri.edu

Current Projects

- Early Diagnosis of Arthritis
- Meniscal Tissue Engineering
- Characterization of Meniscal Disease
- Characterization of Osteochondrosis
- Biologic Total Joint Replacement
- Regional Effects of Cartilage Damage
- Mechanisms of HA therapy in OA
- ACL Pathology and Repair



Correlation of ultrasonography and MRI for diagnosis of meniscal disease – Drs. Roller and Luther

Last quarter's "top 5"

1. Pfizer donates \$70,000 to COL for research
2. COL Council established
3. COL submits proposal for \$7.2 million grant
4. 7 abstracts accepted for ORS presentations
5. MBA review of lab operations completed

In the news

Two current projects in the COL, **Early Diagnosis of Osteoarthritis** and **Biologic Total Joint Replacements**, have received considerable attention in the press. This work even made the front page of the *St. Louis Post-Dispatch*. A total of 14 articles and 3 television spots have appeared in the media covering this research.



Recent Pubs

1. Fox DB, et al. Effects of dynamic compressive load on collagen-based scaffolds seeded with fibroblast-like synoviocytes. *Tissue Eng* 2006
2. Hughes MS, et al. Enhanced fracture and soft tissue healing by means of anabolic dietary supplementation. *J Bone Joint Surgery* 2006
3. Stoker AM, et al. Site-specific analysis of gene expression in early osteoarthritis using the Pond-Nuki model in dogs. *J Ortho Surg Res* 2006
4. Thieman KM, et al. Effect of meniscal release on rate of subsequent meniscal tears and owner-assessed outcome in dogs with cruciate disease treated with tibial plateau leveling osteotomy. *Vet Surg* 2006
5. Greenberg DD, et al. Biochemical effects of two different hyaluronic acid products in a co-culture model of osteoarthritis. *Osteoarthritis and Cartilage* 2006
6. Cook JL, et al. Evaluation of small intestinal submucosa grafts for meniscal regeneration in a clinically-relevant posterior meniscectomy model in dogs. *J Knee Surg* 2006
7. Fox DB, et al. Principles of uniapical and biapical radial deformity correction using dome osteotomies and the center of rotation of angulation methodology in dogs. *Vet Surg* 2006
8. Cook JL, et al. Long-term evaluation of treatment of large meniscal defects using small intestinal submucosa in a dog model. *Am J Sports Med* 2006
9. Beam RC, et al. Three-dimensional computed tomography for diagnosis and treatment planning for a case of intermittent open-mouth jaw locking in a Persian cat. *J Am Vet Med Assoc* 2007