



Winter Quarter 8:1;2014

e-news



# Comparative Orthopaedic Lab

”Finding a joint solution”

<http://medicine.missouri.edu/columc.com/>

## 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
- Meniscal Tissue Engineering
- Novel Model for Post-ACL Treatment
- In Vivo Model for Post-Traumatic OA
- Optimizing PRP for Orthopaedics

## Last quarter's "top 5"

1. Dr. Aaron Stoker announced as COL's second Associate Director
2. Dr. Jimi Cook recognized with FSU's *Grad Made Good Award* for his work in the COL
3. Dr. Nicole Waters completed her PhD in Pathobiology in the COL
4. COL Team had 10 abstracts accepted for presentation at the 2014 ORS Annual Meeting
5. Mizzou OCA Preservation System moves towards clinical assessment with MTF

### Dr. Aaron Stoker, Associate Director



### COL Research is Milestone in Mizzou's History

The COL's groundbreaking work in biologic joint replacement was recognized as one of the noteworthy achievements in Mizzou's 175-year history. <http://mizzomag.missouri.edu/2013/11/a-timeline-of-mizzou-achievements/>



### Recent Pubs

1. Kelly TA, et al. Tissue-engineered cartilage exhibits tension-compression nonlinearity reminiscent of native cartilage. *J Biomech* 2013
2. Cook JL, et al. Evaluation of synthetic osteochondral implants. *J Knee Surg* 2013
3. Cook JL. Lameness in dogs. *NAVJ Clin Brief* 2013
4. Franklin SP, et al. Prospective trial of ACP versus HA+Steroid for elbow osteoarthritis in dogs. *Can Vet J* 2013
5. Garrity JT, et al. Improved osteochondral allograft preservation using serum-free media at body temperature. *Am J Sports Med* 2012
6. Gregory MH, et al. A review of translational animal models for knee osteoarthritis. *Arthritis* 2012
7. Franklin SP, et al. Outcomes associated with treatments for shoulder instability in dogs. *Vet Surg* 2013
8. Garner BC, et al. Expression of proteins in serum, synovial fluid, synovial membrane and cartilage from dogs with OA. *AJVR* 2013
9. O'Connell GD, et al. Toward engineering a biologic joint replacement. *J Knee Surg* 2012
10. Stoker AM, et al. Improved preservation of fresh osteochondral allografts for clinical use. *J Knee Surg* 2012