

Thompson Laboratory for Regenerative Orthopaedics

"Discovering Better"

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Littlejohn Legacy Research Award



Through the many generous donations in honor of Dr. Robert Littlejohn and his dear friend Mr. Charles Lusk, we established the Littlejohn Legacy Research Award. This award was created to honor the life and legacy of

Dr. Littlejohn by supporting orthopaedic learners in pursuit of advances that change healthcare for the better. We believe this is a fitting legacy for all that Dr. and Mrs. Littlejohn accomplished, supported and encouraged during their many years of involvement with Mizzou Orthopaedics and the Thompson Laboratory for Regenerative Orthopaedics. Thompson Lab leadership will select the recipient each year, beginning in summer 2020 with a \$1,000 award to support the recipient's orthopaedic training and/or research. The award will be

funded through the Cook Family Orthopaedic Research Endowment. Further donations to this award can be sent to MU Office of Advancement, 407 Reynolds Alumni Center, Columbia, MO 65211. Gifts made to the Cook Family Orthopaedic Research Fund via check should be made out to the University of Missouri.

TLRO Team Stands Out at ORS

Mizzou Orthopaedics dominated the Orthopaedic Research Society's (ORS) 2020 Annual Meeting held Feb 8-11 in Phoenix, AZ presenting 61 peer-reviewed abstracts as a poster or podium presentation.



We are sorry we had to cancel Comparative Orthopaedics Day for 2020.

Please plan on attending next year!

Current Projects

- Precision Medicine for Hip Dysplasia
- Immunology of Osteochondral Allograft Bone
- Iron Chelators for OCA Bone Integration
- BioJoint® Flex Knee Rehab System
- Precision Medicine for Knee OA
- Machine Learning for PTOA
- DoD BioJoint Knee and Ankle Clinical Trials
- RIA vs BMAC for Bone Healing
- Sex Differences in ACL Graft Healing
- Bone Quality after Bariatric Surgery
- Biomarkers for IVD Disease
- Updating Skeletal Maturity Methods

Last Quarter's "Top 5"

- 1. TLRO Team publishes landmark study on patient outcomes after BioJoints in *AJSM*
- **2.** TLRO Precision Medicine for Hip Dysplasia featured in the *Columbia Tribune*
- **3.** TLRO student, Ally Sivapiromrat, selected as Mizzou Nobel Scholarship recipient
- **4.** TLRO Orthopaedic Biostatistics Team presents work at National Conference
- **5.** TLRO research on Elbow Ligament Repair and Reconstruction earns top award at AOA

Recent Pubs

- 1. Stannard JP, et al. Prospective assessment of outcomes after OCA transplantation in the knee. Am J Sports Med 2020
- 2. Smith MJ, et al. Comparison of biologic scaffolds for partial rotator cuff tears in a canine model. J Shoulder Elbow Surg 2020
- 3. Melbourne CS, et al. Indications and outcomes for PRP injections in an orthopaedic-specific hospital. Curr Orthop Pract 2020
- 4. Rucinski K, et al. Effects of preop education on postop opioid use and pain management in orthopaedics. J Orthop 2020
- 5. Smith PA, et al. Medial meniscotibial ligament disruption vs peripheral meniscal tear knee biomechanics. J Knee Surg 2020
- 6. Stefani RM, et al. Pulsed electromagnetic fields promote repair of focal articular cartilage defects. Biotech Bioeng 2020
- 7. Lambrechts MJ, et al. NSAIDs and their neuroprotective role after an acute spinal cord injury. Global Spine J 2020
- 8. Rucinski K, et al. Effects of compliance on outcomes after OCA and meniscal allograft transplantation. Orthop J Sports Med 2019
- 9. Stefani RM, et al. Dexamethasone delivery via microsphere-embedded agarose for osteochondral repair. Acta Biomater 2019
- 10. Baker BS, et al. Blood flow restriction therapy in patient older than age 50. A systematic review. Clin Orthop Relat Res 2019
- 11. Oliver HA, et al. Enhanced subchondroplasty treatment for cartilage and subchondral bone marrow lesions. J Orthop Res 2019
- 12. Stoker AM, et al. Metabolic responses of osteochondral allografts to re-warming. J Orthop Res 2019
- 13. Chastain K, et al. Metabolic responses of meniscal tissue to focal collagenase degeneration. Conn Tiss Res 2019