Department Scholarly Activities
Faculty, Staff, Residents, Students
July 1, 2007 – June 30, 2009

Publications

Chong AC, Friis EA, Ballard GP, Czuwala PJ, Cooke FW. Fatigue performance of composite analogue femur constructs under high activity loading. *Ann Biomed Eng*. 2007;35(7):1196-205.

Dunlap JT, Lim MR, Whitaker MC. Soft disk herniation: anterior versus posterior approaches. In: Albert TJ, Lee JY, Lim MR, eds. *Cervical Spine Surgery Challenges: Diagnosis and Management*. New York, NY: Thieme; 2008:47-52.

Dunlap JT, Chong ACM, Lucas GL, Cooke FW. Structural Properties of a Novel Design of Composite Analogue Humeri Models. *Annals of Biomedical Engineering*. November 2008; 36(11):1922-1926.

Grimm M, Radin E, Wooley PH. The Pathophysiology and Biomechanics of Nonunion. In: Moed, Watson, eds. *Fracture Nonunions*. London: Arnold Press; 2008 (in press).

Manske RC, Prohaska DJ. Clinical commentary: pectoralis major tendon repair post surgical rehabilitation. *North American Journal of Sports Physical Therapy*. 2007;2(1):22-33.

Manske RC, Prohaska DJ. Diagnosis and management of adhesive capsulitis. *Curr Rev Musculoskelet Med* [online]. Friday, May 23, 2008;10 pgs. DOI 10.1007/s12178-008-9031-6.

Manske RC, Prohaska DJ. Physical Examination and Imaging of the Acute Multiple Ligament Knee Injury. *North American Journal of Sports Physical Therapy*. November 2008; 3(4): 191-197.

McQueen DA, Long MJ, Algotar AM, Schurman JR, Banglaore VG. The effect of obesity on quality-of-life improvement after total knee arthroplasty. *Am J Orthop* [online]. 2007; Aug; 36(8):E117-20, E127.

Ottaviani RA, Wooley PH, Song Z, Markel DC. Inflammatory and immunological responses to hyaluronan preparations using a murine biocompatibility model. *Journal of Bone & Joint Surgery*. 2007;89:148-157.

Patel M, VandeVord PJ, Mathew H, Wu B, DeSilva SP, Wooley PH. Video gait analysis of functional recovery of nerves repaired with chitosan nerve guides. *Tissue Engineering.* 2008;12:(in press).

Ren W, Markel DC, Schwendener R, Ding Y, Wu B, Wooley PH. Macrophage depletion diminishes implant wear–induced inflammatory osteolysis in a mouse model. *Journal of Biomedical Materials Research*. 2008;Part A:(in press).

Ren W, Zhang R, Markel DC, Wu B, Peng X, Hawkins M, Wooley PH. Blockade of vascular endothelial growth factor activity suppresses wear debris-induced inflammatory osteolysis. *J Rheumatology*. 2007;34:27-35.

Wooley PH. What animal models are best to test novel rheumatoid arthritis therapies? *Current Rheumatology Reviews*. 2008:(in press).

Yang S-Y, Wu B, Yu H, Mayton L, Costello R, Wooley PH. A murine model of prosthesis failure for the long-term study of aseptic loosening. *Journal of Orthopaedic Research*. 2007;25(5):603-611.

Yang S-Y, Yu H, Krygier JE, Wooley PH, Mott MP. High VEGF with rapid growth and early metastasis in a mouse osteosarcoma model. *Sarcoma* [online]. 2007:95628,7 pgs. DOI:10.1155/2007/95628.

Yin D, Jia T, Yu H, Wooley PH, Mott MP, Yang S-Y. VEGF blockade decelerates the growth of a murine experimental osteosarcoma. *Int J Oncol.* 2008;33(2):253-259.

Yu H, Matthew HW, Wooley PH, Yang S-Y. Effect of porosity and pore size on microstructures and mechanical properties of poly-ε-caprolactone-hydroxyapatite composites. *J Biomed Mater Res B*. 2008;86B(2):541-547.

Yu H, Wu B, Mayton L, Song Z, Matthew HW, VandeVord PJ, Wooley PH, Yang S-Y. Promotion of osteogenesis in tissue engineered bone by pre-seeding endothelial progenitor cells-derived endothelial cells. *J Orthop Res*. 2008;26(8):1147-1152.

Zhang L, Niu T, Yang S-Y, Chen B. The occurrence and regional distribution of DR4 on herniated disc cells: a potential apoptosis pathway in lumbar intervertebral disc. *Spine*. 2008;33(4):422-427.

Zhang T, Gong W, Yang S-Y, Zhang K, Yin D, Xu P, Jia T. Efficacy of hyperbaric oxygen on survival of random pattern skin flap in diabetic rats. *Undersea Hyperb Med*. 2007;34:335-339.

Presentations

Black MD, Jones TL, McQueen DA, Schmier J, Rugo E. Cost effectiveness of amputation vs. tumor prosthesis in failed total knee arthroplasty and knee trauma. Presented at: 75th Annual Meeting of the American Academy of Orthopaedic Surgeons; March 5 – 9, 2008; San Francisco, CA. (Poster #171)

Black MD, Jones TL, McQueen DA, Schmier J, Rugo E. Cost Effectiveness of Amputation vs. Tumor Prosthesis in Failed Total Knee Arthroplasty and Knee Trauma. The American Orthopaedic Association, 122nd Annual Meeting, June 10-13, 2009, Bonita Springs, Florida.

Chen B, Ma B, Xing X, Hu Y, Yang SY. DR5 and DcR2 Expression in Human Lumbar Intervertebral Discs. Orthopaedic Research Society Conference, 2009 Annual Meeting, February 22 – 25, 2009, The Venetian Hotel & Resort, Sands Expo Convention Center, Las Vegas, Nevada. (poster #1657)

Cusick R . Constraint in Total Knee Arthroplasty. Kansas Orthopaedic Society Meeting, September 19, 2008, Room 2035, Via Christi Regional Medical Center-St. Francis Campus. (presentation)

Dunlap JT, Chong ACM, Lucas GL, Cooke FW, Tiruvadi V. A biomechanical comparison of locking compression plate fixation constructs. Paper presented at: 55th Annual Mid-Central States Orthopaedic Society Meeting; June 4 – 8, 2008; Jackson Hole, WY.

Dunlap JT, Chong ACM, Lucas GL, Cooke FW, Tiruvadi V. A biomechanical comparison of locking compression plate fixation constructs for the treatment of humeral nonunion. Paper and poster #47 presented at: 16th Annual University of Kansas School of Medicine-Wichita Research Forum; May 2 – 3, 2008; Wichita, KS.

Gardner MP, Chong ACM, Pollock AGA, Wooley PH. Mechanical Validation of Fourth-Generation Composite Femur and Tibia Models. Orthopaedic Research Society Conference, 2009 Annual Meeting, February 22 – 25, 2009, The Venetian Hotel & Resort, Sands Expo Convention Center, Las Vegas, Nevada. (poster #765)

Hao H-N, Yang S-Y, Wooley PH. Toll-like receptor expression is necessary for synovial type II cells to respond to LPS: a potential mechanism of reactive arthritis. Paper presented at: 94th Annual Meeting of the American Association of Immunologists; November 2007; Miami Beach, FL.

Kampmann BD, Howell SJ, Jones TL, McDaniel M. Expanding Indications of the Distal Chevron Osteotomy with a Lateral Release in Hallux Valgus. Mid-America Orthopaedic Association, 27th Annual Meeting, April 22-26, 2009, Amelia Island Plantation, Amelia Island, Florida. (Presentation, paper #147)

Livermore R . Elbow Injuries in the Throwing Athlete. Kansas Orthopaedic Society Meeting, September 19, 2008, Room 2035, Via Christi Regional Medical Center-St. Francis Campus. (presentation)

Lucas BL, Chong ACM, Buhr BR, Wooley PH. Biomechanical Comparison of Distal Locking Screws for Distal Tibia Fracture Intramedullary Nailing. Kansas Orthopaedic Society Meeting, September 19, 2008, Room 2035, Via Christi Regional Medical Center-St. Francis Campus. (presentation)

Lucas BL, Chong ACM, Buhr BR, Wooley PH. Biomechanical Comparison of Distal Locking Screws for Distal Tibia Fracture Intramedullary Nailing. Mid-America Orthopaedic Association, 27th Annual Meeting, April 22-26, 2009, Amelia Island Plantation, Amelia Island, Florida. (Presentation, paper #92)

Lucas BL, Chong ACM, Buhr BR, Wooley PH. Biomechanical Comparison of Distal Locking Screws for Distal Tibia Fracture Intramedullary Nailing. Orthopaedic Research Society Conference, 2009 Annual Meeting, February 22 – 25, 2009, The Venetian Hotel & Resort, Sands Expo Convention Center, Las Vegas, Nevada. (poster #732)

McQueen DA. Cemented fixation of total hip arthroplasty. Paper presented at: Del Sur de Orthopedia y Traumatologla; April 24-25, 2008; Chilian, Chili.

McQueen DA. Cemented fixation of total knee arthroplasty. Del Sur de Orthopedia y Traumatologla; April 24-25, 2008; Chilian, Chili.

McQueen DA. Cemented total hip arthroplasty. Paper presented at: 44th Annual Meeting of the Argentine Orthopaedic & Traumatology; December 12-18, 2007; Mar Del Plata, Argentina.

McQueen DA. Defect management on revised TKA. Paper presented at: 44th Annual Meeting of the Argentine Orthopaedic & Traumatology; December 12-18, 2007; Mar Del Plata, Argentina.

McQueen DA. Fracturas peri, protésicas en rodilla. Paper presented at: Association Mexicana of Orthopaedics & Traumatology (AMOT); November 3, 2007; Mérida, MX.

McQueen DA. Knee arthrodesis. Paper presented at: Advances in Surgical Technology; December 1, 2007; New York City, NY.

McQueen DA. Management of bone loss in total knee arthroplasty. Paper presented at: Del Sur de Orthopedia y Traumatologla; April 24-25, 2008; Chilian, Chili.

McQueen DA. Manejo de fefectos en ATR de revisión. Paper presented at: Association Mexicana of Orthopaedics & Traumatology (AMOT); November 2, 2007; Mérida, MX.

McQueen DA. Primary THA. Paper presented at: 15th Annual Perspectives in Total Joint Arthroplasty; October 12-13, 2007; Fall River, KS.

McQueen DA. Restoration modular hip. Paper presented at: Brazilian Hip Society; September 25, 2007; Curitiba, Brazil.

McQueen DA. Restoration modular hip. Paper presented at: Hospital Santa Casa de Misericordia; September 26, 2007; Curitiba, Brazil.

McQueen DA. Surgical approaches in TKA. Paper presented at: Del Sur de Orthopedia y Traumatologla; April 24-25, 2008; Chilian, Chili.

McQueen DA. The challenge of obesity for THA. Paper presented at: Advances in Surgical Technology; November, 29, 2007; New York City, NY.

McQueen DA, Ramakrishnan R, Gelman O, Jasinski D. The Effect of Single Use Instrumentation on OR Efficiency for Total Knee Arthroplasty: A Multicenter Efficiency Study. 2009 Association of periOperative Registered Nurses (AORN) 56th Congress, March 14 to 19, 2009 Chicago, IL. (poster #1969)

Mitchell JD, Schurman JR II, Chong ACM, Czuwala PJ, Cooke FW. Transverse femoral torque in total hip arthroplasty (THA). Paper and poster #19 presented at: 16th Annual University of Kansas School of Medicine-Wichita Research Forum; May 2 – 3, 2008; Wichita, KS.

Morishige MI, McQueen DA, Ballard GP, Chong ACM, Cooke FW. The influence of sequential debridement in TKA on the flexion axis using computer-aided navigation system. Poster #27 presented at: 26th Annual Mid-America Orthopaedic Association Meeting; April 16 – 20, 2008; ChampionsGate, FL.

Morishige MI, McQueen DA, Ballard GP, Chong ACM, Cooke FW. The influence of sequential debridement in total knee arthroplasty on the flexion axis of the knee using computer-aided navigation. Paper and poster #50 presented at: 16th Annual University of Kansas School of Medicine-Wichita Research Forum; May 2 – 3, 2008; Wichita, KS.

Morishige MI, McQueen DA, Ballard GP, Chong ACM, Cooke FW. The influence of sequential debridement in total knee arthroplasty on the flexion axis of the knee using computer-aided navigation. Paper presented at: Kansas Orthopaedic Society Annual Membership Meeting; September 21, 2007; Kansas City, KS.

Pate RC, Shields NN, Fanning JW. Reliability of Hallux Rigidus Radiographic Grading System. Kansas Orthopaedic Society Meeting. September 19, 2008, Room 2035, Via Christi Regional Medical Center-St. Francis Campus. (presentation)

Ren W, Zhang R, Hawkins M, Shi T, Wooley PH, Markel D. Effects of Local Delivery of Erhtyromycin on Particle-induced Osteolysis in a Rat Model. Orthopaedic Research Society Conference, 2009 Annual Meeting, February 22 – 25, 2009, The Venetian Hotel & Resort, Sands Expo Convention Center, Las Vegas, Nevada. (poster #2362)

Wall BA, Moskowitz A, Whitaker MC, Jones TL, Maben CL. Functional outcomes of thoracic and lumbar spine fractures. Paper #108 presented at: 26th Annual Mid-America Orthopaedic Association Meeting; April 16 – 20, 2008; ChampionsGate, FL.

Wall BA, Moskowitz A, Whitaker MC, Jones TL, Maben CL. Functional and clinical outcomes of thoracolumbar junction (T10 – L2) fractures in trauma patients. Paper presented at: 55th Annual Mid-Central States Orthopaedic Society Meeting; June 4 – 8, 2008; Jackson Hole, WY.

Wall BA, Moskowitz A, Whitaker MC, Jones TL, Maben CL. Functional and clinical outcomes of thoracolumbar junction (T10 – L2) fractures in trauma patients. Paper and poster #22 presented at: 16th Annual University of Kansas School of Medicine-Wichita Research Forum; May 2 – 3, 2008; Wichita, KS.

Wall BA, Moskowitz A, Whitaker MC, Jones TL, Maben CL. Functional and clinical outcomes of thoracolumbar junction (T10 – L2) fractures in trauma patients. Poster presented at: 59th Annual Wichita Medical Research and Education Foundation Meeting; May 28, 2008; Wichita, KS.

Wall BA, Moskowitz A, Whitaker MC, Jones TL, Maben CL. Functional and clinical outcomes of thoracolumbar fractures in trauma patients. Paper presented at: Kansas Orthopaedic Society Annual Membership Meeting; September 21, 2007; Kansas City, KS.

Wall BA, Moskowitz A, Whitaker MC, Jones TL, Maben CL. Functional outcomes of thoracic and lumbar spine fractures. Paper #534 presented at: 75th Annual Meeting of the American Academy of Orthopaedic Surgeons; March 5 – 9, 2008; San Francisco, CA.

Wall BA, Moskowitz A, Whitaker MC, Jones TL, Maben CL. Functional and clinical outcomes of thoracolumbar junction (T10 – L2) fractures in trauma patients. E-poster #761 presented at: 15th International Meeting on Advanced Spine Techniques; July 8 – 11, 2008; Hong Kong, China.

Wooley PH. Orthopaedic Wear Debris and its consequences. Invited lecturer: Orthopaedic Grand Rounds; 2007; University of Massachusetts, Worcester.

Wooley PH. The biological response to nanoparticles – does size really matter? Invited Lecturer: Nano@Wayne Lecture Series; 2007; Wayne State University, MI.

Wooley PH. Orthopaedic Wear Debris and its consequences. Invited Lecturer: Orthopaedic Grand Rounds; 2007; Henry Ford Hospital, Detroit.

Wooley PH, Song Z, Harrison A. Evaluation of the Biocompatibility of Durolane Using the Murine Air Pouch Model. Orthopaedic Research Society Conference, 2009 Annual Meeting, February 22 – 25, 2009, The Venetian Hotel & Resort, Sands Expo Convention Center, Las Vegas, Nevada. (poster #504)

Yang S-Y. A long-term model of osteolytic prosthetic failure and potential gene therapy. Paper presented at: The 3rd International Conference on Osteoporosis and Bone Research; October, 2007; Shanghai, China.

Yang S-Y. OPG or sTFNR gene transfer respectively ameliorates the disease progression without synergic effects in collagen-induced arthritis. Paper presented at: The National Arthritis Research Conference; June 2007; Stone Mountain, GA.

Yang SY, Yin D, Mott M, Hendry W, Wooley PH. The Influence of Soluble Flt-1 Gene Modification to the Growth of Experimental Osteosarcoma. Orthopaedic Research Society Conference, 2009 Annual Meeting, February 22 – 25, 2009, The Venetian Hotel & Resort, Sands Expo Convention Center, Las Vegas, Nevada. (poster #1565)

Yu H, Matthew HW, VandeVord PJ, Wooley PH, Yang S-Y. Improve tissue-engineered bone regeneration by introducing endothelial cells-initiating vascularization. Paper presented at: Tissue Engineering International & Regenerative Medicine Society (TERMIS_EU); June 2008; Porto, Portugal.

Yu H, Wu B, Song Z, Wooley PH, Yang S-Y. Pre-seeding bone marrow cells-derived endothelial cells promotes in vivo osteogenesis of bone substitutes. Paper presented at: 32nd Annual Meeting & Exposition of Society for Biomaterials; April 2007; Chicago, IL.

Zhang K, Jia T-H, Yin D, Zhang T, Markel D, Wooley PH, Yang S-Y. A SCID-Hu chimera model with peripheral blood monocytes transfusion for osteolytic prosthesis failure. Paper presented at: The 54th Annual meeting of Orthopaedic Research Society; March, 2008; San Francisco, CA.

Zhang T, Wooley PH, Gong W, Yang SY. The Therapeutic Effects of OPG Gene Transfer on a Mouse Model of Debris-associated Joint Prosthesis. Orthopaedic Research Society Conference, 2009 Annual Meeting, February 22 – 25, 2009, The Venetian Hotel & Resort, Sands Expo Convention Center, Las Vegas, Nevada. (poster #2291)

Department Awards/Honors

Faculty, Staff, Residents, Students

Award/Honor Received	Name of Faculty/Staff/Resident/Student
2008 OREF Resident Symposium Competition Award (plaque and $500)	Bradford A. Wall, MD (resident)
2008 OREF Resident Symposium Competition Award (plaque and $500)	James T. Dunlap, MD (resident)

2007 Kansas Orthopaedic Society Resident Award ($200)	Bradford A. Wall, MD (resident)
2007 Kansas Orthopaedic Society Resident Award ($200)	Mark I. Morishige, MD (resident)
2008 Mid-Central States Orthopaedic Society Unknown Pathology Award (plaque)	Bradford A. Wall, MD (resident)
2008 Kansas Orthopaedic Society Resident Award ($200)	Ryan C. Pate, MD (resident)
2008 Kansas Orthopaedic Society Resident Award ($200)	Brennen L. Lucas, MD (resident)
2009 Mid-America Orthopaedic Society Education Grant for Senior Residents/Fellows ($2,500)	Brian D. Kampmann, MD (resident)
2009 Mid-America Orthopaedic Society Education Grant for Senior Residents/Fellows ($2,500)	Brennen L. Lucas, MD (resident)