

## ORIGINAL PUBLICATIONS IN PEER REVIEWED JOURNALS

- **Jay, GD**, Ross, FL, Mason, RA and Giron, F: Clinical and chemical characterization of an adventitial popliteal cyst. *J Vasc Surg* 1989;9:448-451.
- **Jay, GD**, Culp, DJ and Jahnke, MR: Silver-staining of extensively glycosylated proteins on SDS-polyacrylamide gels: Enhancement by carbohydrate-binding dyes. *Anal Biochem* 1990;185:324-330.
- **Jay, GD**, Drummond, E and Lane, B: Altered surface characteristics of stretched condom latex. *Contraception* 1992;45:105-110.
- **Jay, GD** and Renzi, FP: Evaluation of pulse oximetry in anemia from hemoglobin-H disease: A case report. *Ann Emerg Med* 1992;21:572-574.
- **Jay, GD**: Characterization of a lubricating fraction of bovine synovial fluid I. Chemical and lubricating properties. *Conn Tiss Res* 1992;28:71-88.
- **Jay, GD** and Hong, B: Characterization of a lubricating fraction of bovine synovial fluid II. Comparison with salivary and ocular mucin. *Conn Tiss Res* 1992;28:89-98.
- **Jay, GD**, Lane, B, and Sokoloff, L: Characterization of a lubricating fraction of bovine synovial fluid III. The interaction with hyaluronic acid. *Conn Tiss Res* 1992;28:245-256.
- **Jay, GD**, Kinkead, T, Hopkins, T and Wollin, M: Obstructive uropathy from uterine prolapse: A preventable problem in the elderly. *J Am Geriatr Soc* 1992;40:1156-1160.
- Pires, LA and **Jay, GD**: Upper extremity deep vein thrombosis: Thrombolytic therapy with anistreplase (APSAC). *Ann Emerg Med* 1993;22:748-750.
- **Jay, GD** and Renzi, FP: Pulse oximetry is accurate in anemia from acute hemorrhage. *Ann Emerg Med* 1994;24:32-35.
- **Jay, GD** and Woolard, RH: Physician awareness of hyperbaric oxygen in a large tertiary care hospital. *Undersea Hyper Med* 1994;21:477-479.

- Wright, RO, **Jay, GD**, Becker, BM, Linakis, JG: Use of infrared thermometry to measure intravenous fluid temperature. *Amer J Emerg Med* 1995;13:281-284.
- **Jay, GD**, Tetz, DJ, Hartigan, CF, Aghababian, RV: Portable hyperbaric oxygen therapy in the Emergency Department with the modified Gamow bag. *Ann Emerg Med* 1995;26:707-711.
- Steele, DW, Wright, RO, Lee, C, **Jay, GD**: Methods for continuous non-invasive determination of pulsus paradoxus. *Acad Emerg Med* 1995;2:894-900.
- Wright, RO, Steele, DW, Santucci, K, Natarajan, R, **Jay, GD**: Continuous, non-invasive measurement of pulsus paradoxus in acute asthma. *Arch Ped Adol Med* 1996;150:914-918.
- Wright, RO, Santucci, KA, **Jay, GD**, Steele, DW: Evaluation of pre- and post-treatment pulse oximetry in acute childhood asthma. *Acad Emerg Med* 1997;4:114-117.
- Mehta, S, **Jay, GD**, Woolard, RH, Hipona, RA, Connolly, EM, Cimini, DM, Drinkwine, JH, Hill, NS: Randomized, prospective trial of bilevel versus continuous positive airway pressure in acute pulmonary edema. *Crit Care Med* 1997;25:620-628.
- Wright, RO, Handrigan, M, Becker BM, Linakis, JG, **Jay, GD**: Factors and methodology in achieving ideal delivery temperatures for intravenous and lavage fluids in hypothermia. *Amer J Emerg Med* 1997;15:350-353.
- **Jay, GD**, McKindley, D: Alterations in pharmacokinetics of carboxyhemoglobin produced by oxygen under pressure. *Undersea Hyper Med* 1997;24:165-173.
- Shapiro, M and **Jay, GD**. 1<sup>st</sup> annual New England regional society of academic emergency medicine symposium. *Acad Emerg Med* 1997;4:1162-1167.

- Steele, DW, Santucci, KA, Wright, RO, McQuillen, KK, **Jay, GD**: Pulsus paradoxus: An objective measure of severity in croup. *Am J Resp Crit Care Med* 1998;157:331-334.
- **Jay, GD**, Cha, CJ, Haberstroh, K, Shaw, R: Comparison of the boundary lubricating ability of bovine synovial fluid, lubricin and healon. *J Biomed Mater Res* 1998;40:414-418.
- **Jay, GD**, McKindley, D, Klasner, AE, Smith, SR, Thompson, MW, Scalzo, AJ: Carboxyhemoglobin toxicokinetics. *Acad Emerg Med* 1999;6:766-768.
- Risser, DT, Rice, M, Salisbury, M, Simon, R, **Jay, GD**, Berns, SD and the MedTeams Investigation Group: The potential for improved teamwork to reduce medical errors in the ED.  
*Ann Emerg Med* 1999;34:373-383.
- **Jay, GD** and Cha, CJ: The effect of phospholipase digestion upon the boundary lubricating ability of synovial fluid. *J Rheumatol* 1999;26:2454-2457.
- 26) **Jay, GD**, Britt, DE and Cha, CJ: Lubricin is a product of megakaryocyte stimulating factor gene expression by human synovial fibroblasts. *J Rheumatol* 2000;27:594-600.
- 27) **Jay, GD**, Onuma, K, Davis, R, Mansell, A, Steele, D: Analysis of physician ability in the measurement of pulsus paradoxus by sphygmomanometry. *Chest* 2000;118:348-352.
- 28) **Jay, GD**, Tantravahi, U, Britt, D, Barrach, HJ, Cha, CJ: Homology of lubricin and superficial zone protein (SZP): Products of megakaryocyte stimulating factor (MSF) gene expression by human synovial fibroblasts and articular chondrocytes localized to chromosome 1q25. *J Orthop Res* 2001;19(4):9-19.
- 29) Suner, S, **Jay, GD**, Kleinman, GJ, Woolard, RH, Jagminas, L, Becker, BM: Cardiopulmonary resuscitation using the cardio vent device in a resuscitation model. *J Emerg Med* 2002; 22(4):335 - 340.

- 30) Brand, TM, Brand, ME, **Jay, GD**: Enamel nail polish does not interfere with pulse oximetry among normoxic volunteers. *J Clin Monit* 2002;17(2):93-96.
- 31) **Jay, GD**, Harris, DA, Cha, CJ: Boundary lubrication by lubricin is mediated by O-linked  $\beta(1-3)$ Gal-GalNAc oligosaccharides. *Glycoconjugate Journal* 18, 807-815, 2002.
- Morey, J, Simon, R, **Jay, GD**, Wears, RL, Salisbury, M, Berns, SD and the MedTeams Research Consortium: Error reduction and performance improvement in the Emergency Department through teamwork training: Validation results of the MedTeams Project. *Health Services Research* 37(6):1553-1581, 2002.
- Elsaid, KA, **Jay, GD**, Chichester, CO: Detection of collagen type II and proteoglycans In the synovial fluids of patients diagnosed with non-Infectious knee joint synovitis indicates early damage to the articular cartilage matrix. *Osteoarth Cartilag* 11:673-680, 2003.
- **Jay, GD**, Battat, J, Goldsmith, H, Cohen, H, Mauer, J, Lee, P: Single-person cardiopulmonary resuscitation (CPR) using the Kendall cardiovent device compared to two-person CPR in simulated microgravity. *Aviat Space Environ Med* 74:1183-1189, 2003.
- **Jay, GD**, Khaled, EA, Zack, J, Robinson K, Trespalacios, F, Cha, CJ, Chichester, CO: Lack of chondroprotection occurs among emergency department patients with knee joint synovitis. *JRheumatol* 31(3):557-564, 2004.
- **Jay, GD**: Current thinking on viscosupplementation in osteoarthritis. *RI Med J* 87(7):213-215, 2004.
- Schäfer,DB, Wendt, D, Moretti, M, Jakob, M, **Jay, GD**, Heberer, M, Martin, I: Lubricin reduces cartilage-cartilage integration. *Biorheology* 41:503-508, 2004.
- **Jay, GD**: Lubricin and surfacing of articular joints. *Curr Opinion Orthop* 15(5):355-359, 2004.

- Shapiro, MJ, Small, SD, Langford, V, Kaylor, CJ, , Jagminas, L, Suner, S, Morey, J, Salisbury, ML, Simon, R, **Jay, GD**: Simulation-based teamwork training for emergency department staff: Does it improve clinical team performance when added to an existing didactic teamwork curriculum? *Qual Saf Health Care* 13(6):417-421, 2004.
- Benz, M, Chen, C, **Jay, GD**, Israelachvili, J: Static forces, structure and flow properties of complex fluids in highly confined geometries. *Ann Biomed Eng* 33(1):39-51, 2005.
- Overly FL. Wright RO. Connor FA Jr. Fontaine B. **Jay GD**. Linakis JG. Bispectral analysis during pediatric procedural sedation. *Pediatric Emergency Care* 21(1):6-11, 2005.
- Overly FL, Wright RO, Connor FA, **Jay GD**, Linakis JG. Bispectral analysis during deep sedation of pediatric oral surgery patients. *Journal of Oral & Maxillofacial Surgery* 63(2):215-9, 2005.
- Marcelino, J, Rhee, DK, Brown, M, Gong, Y, Smits, P, Lefebvre, V, **Jay, GD**, Stewart, M, Warman, ML, Carpten, JD: The secreted protein lubricin protects cartilage surfaces and inhibits synovial cell adhesion. *J Clin Investigation* 115(3): 622–631, 2005.
- Elsaid, KA, **Jay, GD**, Warman, ML, Rhee, DK, Chichester, CO: Association of articular cartilage degradation and loss of synovial fluid boundary lubricating ability following injury and inflammatory arthritis. *Arthritis Rheum* 52: 1746-1755, 2005.
- Demelis, M, Durfey, N, Sidman, R, Spitalnic, S, **Jay, GD**: Xanthochromia? By which method? A comparison of the visual and spectrophotometric determination of xanthochromia. *Acad Emerg Med* 46: 51-55, 2005.
- Sucov, A, Proano, C, **Jay, GD**. Peer review and feedback can modify pain treatment patterns for emergency department patients with fractures. *Am J Med Qual* 20(3):138-143, 2005.

- McMurdy, JW, **Jay, GD**, Suner, S, Crawford, GP. Diffuse reflectance spectra of the palpebral conjunctiva and its utility as a non-invasive indicator of total hemoglobin. *Journal of Biomedical Optics* 6177:375-384, 2006.
- Kobayashi L, Shapiro MJ, Sucov A, Woolard R, Boss RM, Dunbar J, Sciamacco R, Karpik K, **Jay GD**. Portable advanced medical simulation for new Emergency Department testing and orientation. *Acad Emerg Med* 13(6): 691-695, 2006.
- Kobayashi L, Suner S, Shapiro MJ, **Jay G**, Sullivan F, Overly F, Seekell C, Hill A, Williams KA. Advanced medical simulation evaluation of prehospital disaster medical response paradigms. *Simulation in Healthcare*1(2): 72-78, 2006.
- Sun, Y, Berger, EJ, Zhao, C, **Jay, GD**, An, KN, Amadio, P. Mapping lubricin in canine musculoskeletal tissues. *J Orthop Res* 24(9): 1861-1868, 2006.
- McMurdy, JW, Crawford, GP and **Jay, GD**. Monolithic microspectrometer using tunable ferroelectric liquid crystals. *Appl Phys Letts* 89:081105, 2006.
- James Rayner, Flor Trespalacios, Jason Machan, Vijaya Potluri, George Brown, Linda M. Quattrucci, **Jay, GD**. Continuous non-invasive measurement of pulsus paradoxus complements medical decision making of acute asthma severity. *Chest* 130:754-765, 2006.
- Ranney, M, Partridge, R, **Jay, GD**, Eastman Rozzoli, D, Pandey, P: Rabies antibody seroconversion rates among travelers in Nepal. *J Travel Med* 13(6):329-333, 2006.
- Sun, Y, Berger, EJ, Zhao, C, An, KN, Amadio, PC, **Jay, GD**. Mapping lubricin in canine musculoskeletal tissues. *Conn Tiss Res* 47:215-221, 2006.
- Teeple, E, Fleming, BC, Mechrefe, AP, Crisco, JJ, Brady, MF, **Jay, GD**: Frictional properties of Hartley guinea pig knees with and without proteolytic disruption of the articular surface. *Osteoarth Cartilag* 15:309-315, 2007
- Elsaid, KA, **Jay, GD**, Chichester, CO. Reduced expression and proteolytic susceptibility of lubricin/superficial zone protein may explain early elevation in the coefficient of friction in the joints of rats with antigen-induced arthritis. *Arthritis Rheumatism* 56(1):108-116, 2007.

- 57) Zappone, B, Marina, R, Greene, GW, **Jay, GD**, Israelachvili, JN: Adsorption, lubrication and wear of lubricin on model surfaces: Polymer brush-like behavior of a glycoprotein. *Biophys J* 92:1693-1708, 2007.
- **Jay, GD**, Torres, R, Warman, ML, Laxer, RM, Laderer, M, Breuer, KS: The role of lubricin in the mechanical behavior of synovial fluid. *PNAS* 104(15):6194-6199, 2007.
- Rucevic, M, Fast, LD, **Jay GD**, Trespelacios, FM, Sucov, S, Siryaporn, E, Yow-Pin Lim. Altered levels and molecular forms of granzyme K in plasma from septic patients. *Shock* 29(5):488-493, 2007.
- Crisco, JJ, Blume, J, Teeple, E, Fleming, BC, **Jay, GD**. Assuming exponential decay by incorporating viscous damping improves the prediction of the coefficient of friction in pendulum tests of whole articular joints. *J Eng Med* 221 PartH:325-333, 2007.
- Suner, S, Crawford, McMurdy, J, **Jay, G**. Non-invasive determination of hemoglobin by digital photography of palpebral conjunctiva. *J Emerg Med* 33(2):105-111, 2007.
- Suner, S, McMurdy, J, **Jay, GD**, Crawford, G. Digital imaging, spectroscopy, and liquid crystals in a handheld noninvasive device to determine hemoglobin concentration. *J Soc Information Display* 15(6):399-407, 2007.
- **Jay, GD**, Torres, JR, Rhee, DK, Helminen, HJ, Hytinen, MM, Cha, CJ, Elsaid, K, Kim, KS, Cui, Y, Warman, ML: The association between friction and wear in diarthrodial joints lacking lubricin. *Arthritis Rheum* 56(11):3662-9, 2007.
- Kobayashi, L, Shapiro, MJ, Gutman, DC, **Jay, GD**: Multiple encounter simulation scenario (MESS) for clinical skills and patient safety training of personnel working in high-acuity multi-patient medical environments. *Acad Emerg Med* 14(12):1141-8, 2007.
- Plante, T, Harris, D, Savitt, J, Akhlaghi, F, Monti, J, **Jay, GD**. Carboxyhemoglobin monitored by bedside continuous co-oximetry. *J Trauma* 63(5):1187-1190, 2007.
- Woltman, SJ, **Jay, GD**, Crawford, GP. Liquid-crystal materials find a new order in biomedical applications. *Nature Materials* 6:929-938, 2007.

- Zappone B, Greene GW, Oroudjev E, **Jay, GD**, Israelachvili JN: Molecular aspects of the boundary lubrication by human lubricin: Effect of disulphide bonds and enzymatic digestion. *Langmuir* 2008; 24(4):1495-1508.
- Chang DP, Abu-Lail NI, Guilak F, **Jay, GD**, Zauscher S: Conformational Mechanics, Adsorption, and Normal Force Interactions of Lubricin and Hyaluronic Acid on Model Surfaces. *Langmuir* 2008; 24(4):1183-1193.
- Suner, S, Partridge, R, Sucov, A, Valente, J, Chee, Kerlen, **Jay, GD**. Non-invasive pulse CO-oximetry for carboxyhemoglobin screening in the emergency department: Identifying occult carbon monoxide toxicity. *J Emerg Med* 2008.
- Suner S, **Jay, GD**. Carbon monoxide has direct toxicity on the myocardium distinct from effects of hypoxia in an *ex vivo* rat heart model. *Acad Emerg Med* 15(1):59-65, 2008.
- Teeple E, Elsaid KA, Fleming BC, **Jay GD**, Aslani K, Crisco JJ, Mechrefe AP Coefficients of friction, lubricin and cartilage damage in the anterior cruciate ligament-deficient guinea pig knee. *J Orthop Res* 2008; 26:231-237.
- Taguchi, M, Sun, YL, Zhao, C, Zobitz, ME, **Jay, GD**, Ann, KN, Amadio, PC. Lubricin surface modification improves extrasynovial tendon gliding in a canine model *in vitro*. *J Bone Joint Surgery* 2008; 90:128-135.
- Elsaid, KA, Fleming, BC, Oksendahl HL, Fadale, PD, Hulstyn, MJ, Shalvoy, R, Machan, J, **Jay, GD** Decreased lubricin concentrations and markers of joint inflammation in synovial fluids from patients with anterior cruciate ligament injury. *Arthritis Rheum* 2008; 58(6):1707-1715.
- Coles J, Blum J, **Jay GD**, Darling E, Guilak F, Zauscher S. *In situ* frictional measurement on murine cartilage by atomic force microscopy. *J Biomech* 2008; 41:541-548.
- Chee K, Nilson D, Partridge R, Hughes A, Suner, S, Sucov, A, **Jay, GD**. Finding needles in a haystack: A case series of carbon monoxide poisoning detected using new technology in the emergency department. *Clin Tox* 2008; 46(5):461-469.

- McMurdy, JW, **Jay, GD**, Suner, S and Crawford, G Noninvasive optical, electrical and acoustic methods of total hemaglobin determination. *Clin Chemistry* Feb 2008; 54:264-272.
- Shapiro, M, Gardner, R, Godwin. S, **Jay, GD**, Lindquist, D, Salisbury, M, Salas, E Defining team performance for simulation-based training: Methodology, metrics, and opportunities for emergency medicine. *Academic Emergency Medicine* 2008;15:1008 – 1097.
- Kobayashi, L, Patterson, M, Overly, F, Shapiro, M, Williams, K, **Jay, GD** Educational and research implications of portable human patient simulation in acute care medicine. *Academic Emergency Medicine* 2008;15:1166 – 1174.
- Taguchi, M, Sun, Y-L, Zhao, C, Zobitz, M, Cha, C-J, **Jay, GD**, An, K-N, Amadio, P: Lubricin surface modification improves tendon gliding after tendon repair in a canine model in vitro. *J Orthop Res* 2009; 27:257-263.
- McMurdy, J, **Jay, GD**, Suner, S, and Crawford, G: Photonics based *In Vivo* total hemoglobin monitoring and clinical relevance. *J Biophotonics* 2009; 2(5): 277-287.
- Drewniak, E. **Jay, GD**, Fleming, BC, Crisco, JJ: Comparison of two methods for calculating the frictional properties of articular cartilage using a simple pendulum and intact mouse knee joints. *J Biomech* 2009;(42)12:1996-9.
- Elsaid, KA, Machan, JT, Waller, K, Fleming, BC, **Jay, GD** The impact of anterior cruciate ligament injury on lubricin metabolism and the effect of inhibiting TNF- $\alpha$  on chondroprotection in an animal model, *Arthritis Rheum*, Sep 2009;60(10): 2997-3006. [PMID: 19790069] [PMCID: PMC2800051]
- Chang, D, Abu-Lail, N, Coles, J, Guilak, F, **Jay, GD.**, Zauscher, S, Friction force microscopy of lubricin and hyaluronic acid between hydrophobic and hydrophilic surfaces. *Soft Matter* 2009, 5: 3438 – 3445.
- Taguchi, M, Zhao, C, Sun, YL, **Jay, GD**, An, KN, Amadio, PC, The Effect of Surface Treatment Using Hyaluronic Acid and Lubricin on the Gliding Resistance of Human Extrasynovial Tendons In Vitro. *J Hand Surg AM* 2009 Sept;34(7):1276-81 [PMID: 19556078] [PMCID: PMC2730995]
- Wei, L, Fleming, B, Sun, X, Teeple, E, Wu, W, **Jay, GD**, Elsaid, KE, Luo, J, Machan, J, Chen, Q, A comparison of Differential Biomarkers of Osteoarthritis with and without Post-traumatic Injury in the Hartley Guinea

Pig Model. *Journal of Orthopaedic Research*, 27 January 2010 (28): 900-906  
epub #10.1002/jor.21093 [PMID: 20108346] [PMCID: PMC2875364]

- Kobayashi, L, Lindquist, D, Jenouri, I, Dushay, K, Haze, D, Sutton, E, Smith, JL, Tubbs, R, Overly, F, Foggie, J, Dunbar-Viveiros, J, Marcotte, S, Werner, D, Cooper, M, Martin, P, Tamaro, D, **Jay, GD**, Comparison of sudden cardiac arrest resuscitation performance data obtained from in-hospital chart review and *in situ* high fidelity medical simulation. *Resuscitation*. 2012 Apr;81(4):463-471 [PMID: 20122781]
- Coles, J, Zhang, L, Blum, J, Warman, M, **Jay, GD**, Guilak, F, Zauscher, S, Loss of cartilage structure, stiffness, and frictional properties in mice lacking Prg4. *Arthritis and Rheumatism* 2010 (62) 6:1666-1674 [PMID: 20191580].
- **Jay, GD**, Fleming, BC, Watkins, BA, McHugh, KA, Anderson, SC, Zhang, LX, Teeple, E, Waller, KA, Elsaid, KA. Prevention of Cartilage Degeneration and Restoration of Chondroprotection by Lubricin Tribosupplementation in the Rat Following ACL Transection. *Arthritis and Rheumatism* 2010 (62) 8:2382-2391 [PMID: 20506144] [PMCID: PMC2921027]
- Nilson, D, Partridge, R, Suner, S, **Jay, GD**. Non-invasive Carboxyhemoglobin Monitoring: Screening Emergency Medical Services Patients for Carbon Monoxide Exposure, *Journal of Prehospital and Disaster Medicine* 2010 (25) 3:253-256.
- Zhao, C, Sun, Y-L, Kirk, R, Thoreson, A, **Jay, GD**, Moran, S, An, K-N, Amadio, P, Effects of a Lubricin-Containing Compound on the Results of Flexor Tendon Repairs in a Canine Model *In Vivo*. *Journal of Bone and Joint Surgery (Am)* 2010;92: 1543-1461 [PMID: 20516321]. [PMCID: PMC2874669].
- Teeple, E, Elsaid, KA, Fleming, BC, **Jay, GD**, Zhang, LX, Badger, G, Akelman, M. The Effects of Supplemental Intra-Articular Lubricin and Hyaluronic Acid on the Progression of Post-Traumatic Arthritis in the Anterior Cruciate Ligament Deficient Rat Knee. *American Journal of Sports Medicine* 2011(39) 1:164-172 [PMID: 20855557]. [PMCID: PMC3010331].
- Kohrs, R, Zhao, C, Sun, Y, **Jay, GD**, Zhang, L, Warman, ML, An, K, Amadio, P. Tendon Fascicle Gliding in Wild Type, Heterozygous, and Lubricin Knockout Mice. *Journal of Orthopaedic Research* 2011(29) 3:384-389 [PMID: 20886657].

- Reuvers, J, Thoreson, A, Zhao, C, Zhang, L, Jay, G, An, KN, Warman, M, Amadio, P. The Mechanical Properties of Tail Tendon Fascicles from Lubricin Knockout, Wild Type and Heterozygous Mice. *Journal Structural Biol.* 2011 Oct. 176(1):41-5. [PMID: 21821131]
- Kohn, MD, Sun, Y, Zhao, C, Thoreson, AR, Jay, GD, An, K, Amadio, PC. Human synoviocyte lubricin and bovine synovial fluid lubricin equally improve gliding resistance in a canine model in vitro. *Journal Biotechnology.* 2011. 21(5-6): 281-9. [PMID: 22561248]
- Kobayashi, L, Sweeney, LA, Cousins, AC, Bertsch, KS, Gardiner, FG, Tomaselli, NM, Boss, RM, Gibbs, FJ, **Jay, GD.** Web Survey and Embedded Intervention on Emergency Department Personnel Perceptions of Role in Patient Experience. *European J Emerg Med* 2012 (19):112-116.
- Drewniak, EI., **Jay, GD.**, Fleming, BC., Zhang, L., Warman, ML., Crisco., JJ. Cyclic loading increases friction and changes cartilage surface integrity in lubricin-mutant mouse knees. *Arthritis & Rheumatism*, February 2012, 64(2): 465-473.
- Valente, JH, **Jay, GD.**, Schmidt, ST., Oh, AK., Reinert, SE., Zabbo, CP. Digital imaging analysis of scar aesthetics. *Advances in Skin & Wound Care*, March 2012, 25(3): 119-123.
- Kobayashi, L, Dunbar-Viveiros, J, Devine, J, Jones, M, Overly, F, Gosbee, J, **Jay, GD.** Pilot Phase Findings from High-fidelity In Situ Medical Simulation Investigation of Emergency Department Procedural Sedation. *Simulation in Healthcare.* 2012 April. 7(2): 81-94. [PMID: 22286554]
- **Jay, GD.**, Elsaid, KA., Kelly, KA., Anderson, SC., Zhang, L., Teeple, E., Waller, K., Fleming, BC. Prevention of cartilage degeneration and gait asymmetry by lubricin tribosupplementation in the rat following anterior cruciate ligament transection. *Arthritis & Rheumatism*, April 2012, 64(4): 1162-1171.
- Waller, K., Zhang, LX., Fleming, BC., **Jay, GD.** Preventing friction induced chondrocyte apoptosis: A comparison of human synovial fluid and hylan G-F 20. *Journal of Rheumatology.* 2012 Jul 39(7):1473-80.

- Elsaid, KA; Zhang, L; Waller, K; Tofte, J; Fleming, BC; **Jay, GD**. The impact of forced joint exercise on Lubricin biosynthesis from articular cartilage following ACL transaction and intra-articular lubricin's effect in exercised joints following ACL transaction. *Osteoarthritis and Cartilage*. 2012 Aug 20(8):940-948.
- Kobayashi, L; Parchuri, R; Gardiner, F; Paolucci, G; Tomaselli, N; Al-Rasheed, R; Bertsch, K; Devine, J; Boss, R; Gibbs, F; Goldlust, E; Monti, J; O'Hearn, B; Portelli, D; Siegel, N; Hemendinger, D; **Jay, GD**. Use of in situ simulation and human factors engineering to assess and improve emergency department clinical systems for timely telemetry-based detection of life threatening arrhythmias. *BMJ Quality and Safety*. 2012 (epub).
- Zhao, C., Sun, YL., **Jay, GD.**, Moran, S., An, KN., Amadio, PC. Surface Modification Counteracts Adverse Effects Associated with Immobilization after Flexor Tendon Repair. *Journal of Orthop Res* 2012 Dec 30(12): 1940-1944.
- Carreiro, S., Blum, J., **Jay, GD.**, Hack, J. Intravenous Lipid Emulsion Alters the Hemodynamic Response to Epinephrine in a Rat Model. *Journal of Medical Toxicology*. 2013 Feb 15. [PMID: 23412937]