# MedStar Orthopaedic and Sports Medicine Research Network

# Published Journal Articles, Abstracts, and Book Chapters 2023-24

1. Abraham E, Imbergamo C, Sequeira SB, Gould HP, Lawson J, Dreese JC. Complications associated with proximal hamstring tendon repair: a systematic review [abstr]. Ortho J Sports Med. 2023;11(7 Suppl 3): 10.1177/2325967123S00208.
2. Bodendorfer BM, DeFroda SF, Newhouse AC, Yang DS, Shu HT, Wichman D, Murphy JP, Milner JD, Hartnett DA, Gould H, Chahla J, Nho SJ. Recurrence of hamstring injuries and risk factors for partial and complete tears in the National Football League: an analysis from 2009-2020. Phys Sportsmed. 2023;51(2):139-43. PMID 34878369
3. Carroll A, Ashmyan R, Wright MA, Abbasi P, Gillin TR, Murthi AM. Impact of radiocapitellar interposition arthroplasty on ulnohumeral joint biomechanics. J Shoulder Elbow Surg. 2023;33(3):480-5. PMID: 36252785
4. Chopra A, Wright MA, Murthi AM. Outcomes after arthroscopically assisted lower trapezius transfer with Achilles tendon allograft. J Shoulder Elbow Surg. 2024;33(2):321-7. PMID: 37499785
5. Douoguih WA, Apseloff N, Murray JC, Kelly RL, Svoboda SJ. Suture-augmented ACL repair for proximal avulsion or high-grade partial tears shows similar side-to-side difference and no clinical differences at two years versus conventional ACL reconstruction for mid-substance tears or poor ACL tissue quality. Arthroscopy. 2024;40(3):857-67. PMID: 37479153
6. Gallagher BW, Guyton GP, Bifano S, Abbasi P, Wisbeck J. Lateral column overload in modified double vs triple arthrodesis [abstr]. Foot Ankle Orthop. 2023;8(4):10.1177/2473011423S00337.
7. Gould H, Rate WRI, Harrell RA, Abbasi P, Fillar AL. Effect of poly-L-lactic acid mesh augmentation on cyclic gap formation in transosseous patellar tendon repair: a biomechanical study. J Knee Surg. 2023;36(12):1224-9. PMID: 36049770
8. Gould HP. CORR Insights: High acromial slope and low acromiohumeral distance increase the risk of retear of the supraspinatus tendon after repair. Clin Orthop Relat Res. 2023;481(6):1171-3. PMID 36812065
9. Gould HP, Gosnell GG, Bano JM, Rate WR, Sequeira SB, Marchant MH. Adjustable cortical fixation repair is a safe and effective technique for quadriceps tendon rupture. Arthrosc Sports Med Rehabil. 2023;5(5):100796. PMID: 37753187
10. Gould HP, Lostetter SJ, Samuelson ER, Guyton GP. Lower extremity injury rates on artificial turf and natural grass playing surfaces: a systematic review. Am J Sports Med. 2023;51(6):1615-21. PMID: 35593739
11. Group ACoRR, Lohre R, Swanson DP, Mahendraraj KA, Elmallah R, Glass EA, Dunn WR, Cannon DJ, Friedman LG, Gaudette JA, Green J, Grobaty L, Gutman M, Kakalecik J, Kloby MA, Konrade EN, Knack MC, Loveland A, Mathew JI, Myhre L, Nyfeler J, Parsell DE, Pazik M, Polisetty TS, Ponnuru P, Smith KM, Sprengel KA, Thakar O, Turnbull L, Vaughan A, Wheelwright JC, Abboud J, Armstrong A, Austin L, Brolin T, Entezari V, Garrigues GE, Grawe B, Gulotta LV, Hobgood R, Horneff JG, Iannotti J, Khazzam M, King JJ, Kirsch JM, Levy JC, Murthi A, Namdari S, Nicholson GP, Otto RJ, Ricchetti ET, Tashjian R, Throckmorton T, Wright T, Jawa A. Risk factors of acromial and scapular spine stress fractures differ by indication: a study by the ASES Complications of Reverse Shoulder Arthroplasty Multicenter Research Group. J Shoulder Elbow Surg. 2023;32(12):2483-92. PMID: 37330167
12. Group ACoRR, Lohre R, Swanson DP, Mahendraraj KA, Elmallah R, Glass EA, Dunn WR, Cannon DJ, Friedman LG, Gaudette JA, Green J, Grobaty L, Gutman M, Kakalecik J, Kloby MA, Konrade EN, Knack MC, Loveland A, Mathew JI, Myhre L, Nyfeler J, Parsell DE, Pazik M, Polisetty TS, Ponnuru P, Smith KM, Sprengel KA, Thakar O, Turnbull L, Vaughan A, Wheelwright JC, Abboud J, Armstrong A, Austin L, Brolin T, Entezari V, Garrigues GE, Grawe B, Gulotta LV, Hobgood R, Horneff JG, Iannotti J, Khazzam M, King JJ, Kirsch JM, Levy JC, Murthi A, Namdari S, Nicholson GP, Otto RJ, Ricchetti ET, Tashjian R, Throckmorton T, Wright T, Jawa A. Predictors of dislocations after reverse shoulder arthroplasty: a study by the ASES complications of RSA multicenter research group. J Shoulder Elbow Surg. 2024;33(1):73-81. PMID: 37379964
13. Gupta P, Quan T, Wright MA, Murthi AM. Risks of chronic steroid or immunosuppressive therapy on total shoulder arthroplasty patients. Shoulder Elbow. 2023;15(4):373-80. PMID: 37538522
14. Guyton GP. CORR Insights: What is the efficacy of intra-articular injections in the treatment of ankle osteoarthritis? a systematic review. Clin Orthop Relat Res. 2023;481(9):1825-7. PMID: 37043554
15. Guyton GP. Minimally invasive osteotomies of the calcaneus. In: Ellis S, editor. Master Techniques in Orthopaedic Surgery: The Foot and Ankle. New York: Wolters Kluwer; 2024. In press
16. Haislup B, Lindsey S, Tarapore R, Abbasi P, Wright MA, Murthi A. Biomechanics of subscapularis v-shaped tenotomy compared to standard tenotomy. J Shoulder Elbow Surg. 2024;33(3):604-9. PMID: 37777043
17. Haislup BD, McCormick B, O'Leary MT, Abbasi P, Gillin TR, Wright MA, Murthi AM. A biomechanical comparison of elliptical and spherical humeral head components in shoulder arthroplasty. Semin Arthroplasty. 2023;33(3):498-503.
18. Hembree WC, Noori N, Guyton GP. Pes cavus. In: Haskell A, Coughlin MJ, editors. Coughlin and Mann's Surgery of the Foot and Ankle. 10th ed. New York: Elsevier; 2023. p. 1288-308.
19. Hembree WC, Rodriguez-Materon S, Dai A, Alkaramany E, Mansur NS, Guyton GP. What's new in foot and ankle surgery. J Bone Joint Surg Am. 2024; In press. PMID: 38502715
20. Hembree WC, Tarka MC, Pasternack JB, Mathew SE, Guyton GP. What's new in foot and ankle surgery. J Bone Joint Surg Am. 2023;105(10):737-43. PMID: 36888693
21. Imbergamo C, Sequeira S, Iskandarova A, Giladi A. Distal interphalangeal joint fractures and dislocations. In: Jerome TJ, editor. An Evidence-Based Approach to Fingertip Disease. New York: Thieme Medical Publishers; 2023.
22. Imbergamo C, Sequeira S, Patankar A, Means KR, Jr., Stein J. The statistical fragility of studies on rotator cuff repair with graft augmentation. J Shoulder Elbow Surg. 2023;32(5):1121-5. PMID: 36681109
23. Imbergamo C, Sequeira S, Pizzo D, Wright MA, Boucher HR. Where do orthopaedic applicants match on their rank lists? A survey of incoming residents. JBJS Open Access. 2023;8(1):e22.00089. PMID: 36605355
24. Imbergamo C, Wieland M, Sequeira S, Patankar A, Dreese JC, Gould H. Graft augmentation of rotator cuff repair improves load to failure but does not affect stiffness or gap formation: a meta-analysis of biomechanical studies. Arthroscopy. 2023;39(10):2202-10. PMID: 37207921
25. Jeong S, Lee J, Boucher HR. The effect of preoperative bisphosphonate use on total hip outcomes. J Arthroplasty. 2023;38(11):2393-7. PMID: 37236285
26. Jeong S, Lee JW, Boucher HR. Symptomatic benign prostatic hyperplasia is not associated with a higher risk of periprosthetic joint infections and periprosthetic joint infection-related revisions after primary THA. Clin Orthop Relat Res. 2023;482(1):89-95. PMID: 37458699
27. Kang L, Lee JW, Mistretta KL, Pianka M, Chou J, Macaraeg C, Boucher HR. Comparison of short term results: robotic-assited versus conventional bilateral total knee arthroplasty. Curr Orthop Pract. 2024;35(2):63-70.
28. Karlin E, Lee JW, Sanghavi K, Boucher HR. Patient outcomes of conventional versus robot assisted total hip arthropasty. Curr Orthop Pract. 2024;35(1):5-11.
29. Khan AZ, Maxwell MJ, Parrott RM, Bowler AR, Glass EA, Miller D, Vasconcellos D, Brownhill JR, Austin LS, Cuff DJ, Murthi AM, Smith MJ, Wiater JM, Jawa A. Effect of vitamin E enhanced highly cross-linked polyethylene on wear rate and particle debris in anatomic total shoulder arthroplasty: a biomechanical comparison to ultra-high molecular weight polyethylene. J Shoulder Elbow Surg. 2024;In press.
30. Leape CP, Donaldson ST, Haislup BD, Wright MA, Murthi A. Predicting successful outpatient total shoulder arthroplasty. J Shoulder Elbow Surg. 2023;32(7):1357-63. PMID: 36997152
31. Lee JW, Jeong S, Han HR, Boyd CM, Perrin N, Simmons SF, Green AR, Taylor JL, Boucher HR, Szanton SL. Barriers and facilitators to deprescribing before surgery: A qualitative study of providers and older adults. Geriatr Nurs. 2023;53:135-40. PMID: 37540907
32. Levens B, Kim BS, Asku N, Dorris CS, Svoboda S, Douoguih WA, Dreese JC. Young or old age and non-white race are associated with poor patient-reported outcome measure response compliance after orthopaedic surgery. Arthrosc Sports Med Rehabil. 2023;5(6):100817. PMID: 38023444
33. Lobao MH, Abbasi P, Svoboda S. How many anchors to use in arthroscopic Bankart repairs? A biomechanical study of postage-stamp glenoid fractures. J Shoulder Elbow Surg. 2023;32(12):2541-9. PMID: 37352999
34. Mathew S, Guyton GP. Safe and effective is not always acceptable: the case for PASS scores in foot and ankle surgery [abstr]. Foot Ankle Orthop. 2023;8(4):10.1177/2473011423S00403.
35. Mathew S, Kuripla CS, Coleman MM, Hembree CW, Guyton GP. Clinical outcomes and complications of peroneus brevis allograft reconstruction [abstr]. Foot Ankle Orthop. 2023;8(4):10.1177/2473011423S00132.
36. McCormick B, Sequeira S, Hasenauer M, Boucher HR. The use of continuous positive airway pressure for patients with obstructive sleep apnea is associated with early medical and surgery-related complications following total knee arthroplasty: a national database study. Arthroplasty Today. 2023;19:101085. PMID: 36698756
37. McCormick B, Sequeira S, Hasenauer MD, McKinstry R, Boucher HR. Cushing's syndrome is associated with early medical- and surgery-related complications following total joint arthroplasty: a national database study. J Arthroplasty. 2023;38(12):2568-72. PMID: 37315630
38. McCormick B, Sequeira S, Lee J, Boucher HR. Hormone replacement therapy does not increase thrombosis risk following total hip arthroplasty: a national database study. J Exp Orthop. 2023;10(1):60. PMID: 37261550
39. McCormick B, Trent S, Geng X, Lee JW, Boucher HR. Robotic-assisted technology does not Influence functional outcomes among obese and morbidly obese total knee arthroplasty patients. J Exp Orthop. 2023;10(1):76. PMID: 37523073
40. McCormick B, Trent S, Haislup BD, Bolster D, Bubnash K, Miller SD. Dual semitendinosus allograft reconstruction of chronic Achilles tendon ruptures: operative technique and outcomes. Foot Ankle Int. 2023;44(1):48-53. PMID: 36461671
41. Michaelson EM, Wiesel BB, Siedlarz B, Murthi AM, Sethi P, Lutton D, Nagda S. Accuracy of telemedicine for the diagnosis and treatment of patients with shoulder complaints. Curr Orthop Pract. 2023;34(3):112-6.
42. Mistretta K, Wright MA, Murthi AM. Acute operative stabilization of an elbow dislocation and associated brachial artery injury: a case report. Curr Orthop Pract. 2023;34(2):83-8.
43. Mistretta KL, Abbasi P, Wright M, Murthi AM. Fixation of transverse midshaft clavicle fractures with nitinol staples vs. superior locked plating: a biomechanical study. Curr Orthop Pract. 2023;34(4):137-41.
44. Murthi AM. Device testing. In: Eltorai A, Owens BD, Bakal, DeFroda SF, editors. Translational Sports Medicine: Elsevier; 2023.
45. O'Leary MT, Haislup B, Gillin TR, Abbasi P, Austin L, Wright MA, Murthi A. Effect of reverse shoulder arthroplasty humeral component retroversion on acromial stress. J Shoulder Elbow Surg. 2023;32(6 Suppl):S69-S74. PMID: 36828287
46. Rilk S, Saithna A, Achtnich A, Ferretti A, Sonnery-Cottet B, Kosters C, Bottoni CR, Monaco E, Cavaignac E, Ahlbaeumer G, Brandl G, Mackay GM, Vermeijden HD, Dallo I, Pace JL, van der List JP, Moggia JR, Chahla J, Batista JP, Frosch KH, Schneider KN, Smith PA, Frank RM, Hoogeslag RAG, Eggli S, Douoguih WA, Petersen W, DiFelice GS. The modern-day ACL surgeon's armamentarium should include multiple surgical approaches including primary repair, augmentation, and reconstruction: A letter to the Editor. J ISAKOS. 2023;8(4):279-81. PMID: 37023928
47. Rodriguez-Materon S, Guyton G. The philosophy of surgical success and outcomes of Cartiva versus fusion. Foot Ankle Clin. 2024;In press.
48. Sedgley MD, Hudson K, Hulsopple C. Prepare for the unexpected: a new look at trauma triage and care in mass participation sporting events. Curr Sports Med Rep. 2023;22(1):4-9. PMID: 36606629
49. Sequeira S, Ayan S, Kushare IV, Gould HP, Fillar AL, Dreese J. Posterior root tears of the lateral meniscus only affect tibiofemoral contact forces when the meniscofemoral ligament is involved: a cadaveric study. Arthrosc Sports Med Rehabil. 2023;5(2):e515-e21. PMID: 37101864
50. Sequeira S, Boucher HR. Payor type is associated with increased rates of reoperation and healthcare utilization following unicompartmental knee arthroplasty: a national database study. Arthroplasty Today. 2023;19:101074. PMID: 36605496
51. Sequeira S, Duvall G, Boucher HR. Statistical fragility of venous thromboembolism prophylaxis following total joint arthroplasty. Arthroplasty Today. 2023;20:101111. PMID: 36923060
52. Sequeira S, Duvall G, Boucher HR. A biomechanical comparison between robotic and conventional total knee arthroplasty in resection accuracy: a meta-analysis. J Exp Orthop. 2023;10(1):34. PMID: 36995538
53. Sequeira S, McCormick BP, Hasenauer MD, Boucher HR. Home health care is associated with an increased risk of emergency department visit, readmission, and cost of care without reducing risk of complication following total hip arthroplasty: a propensity-score analysis. J Arthroplasty. 2023;38(7 Suppl 2):S306-S9. PMID: 36775213
54. Sequeira SB, McCormick BP, Hasenauer MD, McKinstry R, Ebert F, Boucher HR. Juvenile idiopathic arthritis is associated with early medical and surgical complications following primary total hip arthroplasty: a national database study. Arthroplasty Today. 2024;In press.
55. Sequeira S, McCormick B, Hasenauer MD, McKinstry R, Ebert F, Boucher HR. Previous extensor mechanism repair is associated with increased rates of surgical complications following total knee arthroplasty: a propensity matched analysis. Arthroplasty Today. 2024;26: 101319.
56. Sequeira S, Sequeira LM, Wieland M, Imbergamo C, Tepper K. No difference in load to failure or stiffness between transosseous tunnels, suture anchors, and cortical buttons for pectoralis major tendon repair: a systematic review and meta-analysis. J Exp Orthop. 2023;10(1):56. PMID: 37233834
57. Sequeira S, Wright M, Murthi A. Payor type is associated with increased rates of reoperation and healthcare utilization following rotator cuff repair: a national database study. J Shoulder Elbow Surg. 2023;32(3):597-603. PMID: 36206978
58. Sequeira SB, Boucher HR. Heart failure is associated with early medical and surgery-related complications following total hip arthroplasty: a propensity-scored analysis. J Arthroplasty. 2023;38(5):868-72 e4. PMID 36470365
59. Sethi P, Fares MY, Murthi A, Tokish JM, Abboud JA. The long head of the biceps tendon: a valuable tool in shoulder surgery. J Shoulder Elbow Surg. 2023;32(9):1801-11. PMID 37245621
60. Swansen T, Wright MA, Murthi AM. Post-operative rehabilitation following rotator cuff repair. Phys Med Rehab Clin N Am. 2023;34(2):357-64. PMID: 37003657
61. Tarapore R, Wieland M, Haislup B, Imbergamo C, McCormick B, Castillo W, Boucher HR. The impact of signaling on the 2022 to 2023 orthopaedic residency application cycle: a survey of incoming residents. JBJS Open Access. 2024;9(1):e23.00135.
62. Tarka M, Gould HP, Camire L, Guyton GP. Data censoring likely biased the largest randomized trial of Achilles tendon rupture treatment against surgery: a Monte Carlo analysis [abstr]. Foot Ankle Orthop. 2023;8(4):10.1177/2473011423S00019.
63. Wieland MD, Sequeira SB, Imbergamo C, Murthi AM, Wright MA. Home health care is associated with an increased risk of readmission and cost of care without reducing risk of complication following shoulder arthroplasty: a propensity-score analysis. J Shoulder Elbow Surg. 2024;in press. PMID: 38122889
64. Wright MA, Aleem AW, Murthi AM, Zmistowski BM. Gender differences among shoulder arthroplasty surgeons: past, present, and future. J Shoulder Elbow Surg. 2024;In press. PMID: 38237720
65. Wright MA, Deal JB, Jr., Schiffman BA, Gould HP, Forthman CL, Murthi AM. No difference in torque load to failure between split anconeus fascia transfer and autograft palmaris longus tendon for reconstruction of the lateral ulnar collateral ligament. JSES Int. 2024;8(1):232-5. PMID: 38312284
66. Wright MA, Murthi AM. The B2 glenoid: evaluation and treatment. Semin Arthroplasty. 2024;34(1):222-7.
67. Wright MA, Murthi AM, Aleem A, Zmistowski B. Patient disparities and provider diversity in orthopaedic surgery: a complex relationship. J Am Acad Orthop Surg. 2023;31(3):132-9. PMID: 36563332
68. Wright MA, Shapiro D, Chopra A, Murthi AM. Limited health literacy in shoulder and elbow patients. Shoulder Elbow. 2024; In press.

## Awards

1. Leape CP, Donaldson ST, Haislup BD, Wright MA, Murthi A. Predicting successful outpatient total shoulder arthroplasty. Received the **3rd place Best Poster Award,** Virginia Orthopaedic Society (VOS), Hot Springs, VA, April 2023.
2. Sequeira S, Ayan S, Kushare IV, Gould HP, Fillar AL, Dreese J. Radial lateral meniscus tears affect contact forces when the meniscofemoral ligament is involved: a cadaveric study. Received the **SOA/OREF Resident Award**, Southern Orthopaedic Association, Miramar Beach, FL, July 2023.
3. Sequeira S, McCormick BP, Hasenauer MD, Boucher HR. Home health care is associated with an increased risk of emergency department visit, readmission, and cost of care without reducing risk of complication: a propensity-score analysis. Received the **Roger H. Michael Resident Project Award for Outstanding Achievement in Orthopedic Research** MedStar Union Memorial Hospital, Department of Orthopedics, Baltimore, MD, June 2023.
4. Sequeira S, McCormick BP, Hasenauer MD, Boucher HR. Home health care is associated with an increased risk of emergency department visit, readmission, and cost of care without reducing risk of complication: a propensity-score analysis. Received the **AAOS Best Poster Award in the Practice Management/Rehabilitation classification,** American Academy of Orthopaedic Surgeons, Las Vegas, NV, March 2023.
5. Tarka M, Gould H, Camire L, Guyton GP. Data censoring likely biased the largest randomized trial of Achilles tendon rupture treatment against surgery: a Monte Carlo analysis. Received the **J. Leonard Goldner Award,** American Orthopaedic Foot and Ankle SocietyLouisville, KY, September 2023.
6. Tarka M, Guyton GP. Data censoring likely biased the largest randomized trial of Achilles tendon rupture treatment against surgery: a Monte Carlo analysis. Received the **Roger H. Michael Fellow Project Award for Outstanding Achievement in Orthopedic Research**, MedStar Union Memorial Hospital, Department of Orthopedics, Baltimore, MD, June 2023.

# MUMH Musculoskeletal Research Center

# Published Journal Articles and Abstracts 2023-24

1. Brooks DM, Cunningham B, McAfee PC. In vivo analysis of wear debris produced from titanium plasma-sprayed implants: a micro–computed tomographic investigation. Spine J. 2024; In press.
2. Cunningham BW, Brooks DM, Rolle NP, Weiner DA, Wang W. An investigational time course study of titanium plasma spray on osseointegration of PEEK and titanium implants: an in vivo animal model. Spine J. 2024;24(4):721-9. PMID: 37875243
3. Hembree CW, Brooks DM, Rosenthal B, Winters C, Pasternack JB, Cunningham B. Effect of distal tibiofibular syndesmosis overcompression on the range of motion of ankle bones: a cadaveric model [abstr]. Foot Ankle Orthop. 2023;8(4):10.1177/2473011423S00295.
4. Homeier D, Kang D, Molinari R, Mesfin A. The top-cited military relevant spine articles. J Orthop. 2024;54:38-45. PMID: 38524362
5. Lucas SL, Gallagher B, Mullinex KP, Brumback RJ, Cunningham BW. 3D-printed model in preoperative planning of sciatic nerve decompression because of heterotopic ossification: A case report. JBJS Case Connect. 2024;14(1):e23.00483. PMID: 38394316
6. McCormick B, Asdourian P, Johnson D, Moatz B, Duvall G, Soda M, Beaufort AR, Chotikul L, McAfee PC. 100 complex posterior spinal fusion cases performed with robotic instrumentation. J Robot Surg. 2023;17(6):2749-56. PMID: 37707742
7. Pivazyan G, Winters C, Brooks DM, Sandhu FA, Cunningham BW. Cervicothoracic reconstruction with quad rods, dual rods, and tapered rods: an in vitro human cadaveric model. World Neurosurg. 2023;180:243-4. PMID: 37839569
8. Pivazyan G, Winters C, Brooks DM, Sandhu FA, Cunningham BW. Biomechanical analysis of 2 versus 4 rods across the cervicothoracic junction in a human cadaveric model. Neurosurgery. 2024;94(1):217-25. PMID: 37706689
9. Tortolani PJ, Lucas SL, Pivazyan G, Wang W, Cunningham BW. Validation of impaction grafting for single-level transforaminal lumbar interbody fusion: technical pearls and microCT analysis. Spine (Phila Pa 1976). 2023;48(6):E70-E7. PMID 36728792

## Awards

1. Pasternack JB, Cunningham B, Brooks DM, Winters C, Rosenthal B, Hembree CW. Effect of distal tibiofibular syndesmosis overcompression on the range of motion of ankle bones: a cadaveric model. **Awarded second place in non-clinical abstracts**, Maryland Orthopaedic Association (MOA), Annapolis, MD, February 2023.