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Associate Professor
Section of Shoulder and Elbow Surgery
Department of Orthopaedic Surgery
University of Utah

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University Orthopaedic Center
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Education and Professional Training

Washington University, <i>Shoulder and Elbow Surgery Fellow</i> Directors: Dr. Jay Keener and Dr. Ken Yamaguchi	St. Louis, MO 2015- 2016
Rush University Medical Center, <i>Orthopaedic Surgery Resident</i> Chairman: Dr. Joshua Jacobs, Program Director: Dr. Brett Levine OITE Percentiles: 2010 97 th 2011 97 th 2012 99 th 2013 97 th 2014 99 th	Chicago, IL 2010 - 2015
Columbia University College of Physicians and Surgeons Medical Degree, USMLE Step I – 264 (99), II – 266 (99), III – 244 (97)	New York, NY 2006 - 2010
Dartmouth College B.S. in Biophysical Chemistry and Biology, <i>Magna Cum Laude</i>	Hanover, NH 2001 - 2005
The Catlin Gabel School Graduated in top 5% of class	Portland, OR 1997 - 2001

Awards

1. ASES European Exchange Fellowship Program. American Shoulder and Elbow Surgeons. December 19, 2022.
2. Neer Circle, American Shoulder and Elbow Surgeons. October 10, 2022.
3. 2021 Leadership Development Program, American Shoulder and Elbow Surgeons
4. “Best Research of 2020 Award” Major League Baseball Winter Meetings, for Chalmers PN, English J, Cushman DM, Zhang C, Presson AP, Yoon S, Schulz B, Li B. The Ulnar Collateral Ligament Responds to Stress in Professional Pitchers, *Virtual secondary to COVID-19*. January 30, 2021.
5. “Best Poster Award” in the Infection Clinical Category. American Association of Hip and Knee Surgeons. Dallas, Texas – Nov 5-8, 2020.
6. *2019 CCJR/ OREF Clinical Practice Award Recipient*. Nahhas CR, Chalmers PN, Pavizi J, Sporer SM, Berend KR, Moric M, Chen A, Austin M, Deirmengian GK, Morris MJ, Della Valle CJ. Randomized trial of static and articulating spacers for the infected TKA. Orlando, FL – December 11-14, 2019.
7. *2018 Tohoku University Traveling Fellow*, Dr. Eiji Itoi, January 2018
8. *Midwest Resident Research Symposia, First Place*, Orthopaedic Research and Education Foundation, University of Chicago, May 2017
9. “#1 Reviewer for 2017” Journal of Shoulder and Elbow Surgery, Dr. William Mallon, March 2017

10. *Best Paper Award*, ICSES 2016 Annual Meeting, Jeju, Korea, May 20, 2016 for Erickson BJ, Sgori T, Chalmers PN, Vignona P, Lesniak M, Bush-Joseph CA, Verma NN, Romeo AA. Does Fatigue Alter Pitching Mechanics?
11. *Carl L. Nelson, M.D. Physician in Training Award*, Mid-America Orthopaedic Association 2016 Annual Meeting, Bonita Springs, FL, April 15, 2016
12. *Chief Resident Golden Apple Teaching Award*, Department of Orthopaedic Surgery, Rush University Medical Center, June 2015
13. *Jorge O. Galante Award for Most Outstanding Chief Resident Research Presentation*, Department of Orthopaedic Surgery, Rush University Medical Center, June 2015
14. *Midwest Resident Research Symposia, Third Place*, Orthopaedic Research and Education Foundation, University of Chicago, April 2015
15. *Jorge O. Galante Award for Outstanding Resident Research*, Department of Orthopaedic Surgery, Rush University Medical Center, June 2014
16. *Resident Leadership Forum*, American Orthopaedic Association, Montreal, Canada, June 2014
17. *Award for Best Multimedia Program*, for “All-Arthroscopic Patch Augmentation of a Massive Rotator Cuff Tear”, American Academy of Orthopaedic Surgery 2014 Annual Meeting
18. *Clinician Scholar Career Development Program*, American Academy of Orthopaedic Surgery, Sept 2013
19. *Outstanding Resident Teacher Award*, Department of General Surgery, Rush University Medical Center, June 2011
20. *Alpha Omega Alpha Honor Society*, College of Physicians and Surgeons, Columbia University, June 2010
21. *Magna Cum Laude*, Dartmouth College, June 2005
22. *Merck Award for Undergraduate Research*, Department of Chemistry, Dartmouth College, June 2005

Publications in Peer Reviewed Sources

In review

1. Kolz C, Sulkar H, Aliaj K, Tashjian RZ, Chalmers PN, Qiu Y, Zhang Y, Foreman B, Anderson A, Henninger HB. Shoulder internal/external rotation in adduction and abduction: The consequences of decomposition sequences. *Gait and Posture*. Under Revision.

In press

2. Bowman EN, Camp C, Erickson BJ, Freehill MT, Smith MV, Madia E, Matthews M, Simister S, Wheelwright C, Ishikawa H, Chalmers PN. Most High School Baseball Pitchers are Using Weighted Ball Throwing Programs to Increase Ball Velocity: Cross Sectional Analysis of US High School Pitchers. *Journal of Shoulder and Elbow Surgery Reviews, Reports & Techniques*.
3. Chalmers PN, Tashjian RZ, Keener JD, Sefko JA, Da Silva A, Morrissey C, Presson AP, Zhang C, Chamberlain AM. Active Physical Therapy Does Not Improve Outcomes After Reverse Total Shoulder Arthroplasty: A Multi-Center, Randomized Clinical Trial. *J Shoulder Elbow Surg*.

4. Ishikawa H, Henninger HB, Yamamoto NY, Tashjian RZ, Itoi E, Chalmers PN. A Stabilizing Role of the Glenoid Labrum: the Suction Cup Effect. *J Shoulder Elbow Surg.*
5. Joyce C, Chalmers PN. Rotator Cuff Repair and Diabetes: Fighting for better glycemic control is worth it. *Arthroscopy.*
6. Rogers MJ, Kahn T, Kim J, Tashjian RZ, Chalmers PN. Factors Associated with Total Shoulder Arthroplasty Cost Variation in the State of Utah. *Seminars in Arthroplasty: JSES.*

Published

7. Clinker CL, Chalmers PN, Romeo AA. Anchorless labral repair for recurrent shoulder instability in the skeletally immature. *Arthroscopic Techniques.* 2022 Oct 20;11(11):e2049-e2053.
8. Schoch BS, Werner BC, Shapiro S, Camp C, Chalmers PN, Cancienne J. Rotator cuff repair with bone marrow aspirate concentrate augmentation decreases the risk of revision surgery. *Orthop J Sports Med.* 2022 Nov 3;10(11):23259671221127004.
9. Sulkar H; Aliaj K; Tashjian R; Chalmers PN; Foreman KB; Henninger HB. High and low performers in internal rotation after reverse total shoulder arthroplasty: A biplane fluoroscopic study. *Journal of Shoulder and Elbow Surgery.* 2022 Nov 4:S1058-2746(22)00807-2.
10. Kawakami J, Henninger HB, Knighton, TW, Yamamoto NY, Tashjian RZ, Itoi E, Chalmers PN. The Effect of Combined Anterior Glenoid Cartilage-Labral Defects on Anterior Glenohumeral Instability: A Biomechanical Study. *Orthop J Sports Med.* 2022 Oct 31;10(10):23259671221130700.
11. Wheelwright CJ, Featherall J, Kazmers K, Tashjian RZ, Chalmers PN. Revision Reverse Total Shoulder Arthroplasty with Pectoralis Major Transfer for Anterior Deltoid Deficiency: A Case Report. *J Bone Joint Surg Case Connector.* 2022 Apr 27;12(2).
12. Cross AG, Khalil LS, Swantek AJ, Lizzio VA, Ziedas AC, Camp CL, Chalmers PN, Smith K, Chaides SE, Rexroth JD, Makhni EC. Athletes Perceive Weighted Baseballs to Carry a Notable Injury Risk, yet Still Use Them Frequently: A Multicenter Survey Study. *J Am Acad Orthop Surg Glob Res Rev.* 2022 Sep 9;6(9).
13. Quinlan NJ, Frandsen J, Smith K, Lu CC, Chalmers PN, Tashjian RZ. Conservatively Treated Symptomatic Rotator Cuff Tendinopathy May Progress to a Tear. *Arthroscopy, Sports Medicine, Rehabilitation.* 2022 Jun 15;4(4):e1449-e1455.
14. Hiroaki I, Smith KM, Wheelwright JC, Christense GV, Henninger HB, Tashjian RZ, Chalmers PN. Muscle imbalance associates with shoulder instability direction. *J Shoulder Elbow Surg.* 2022 Aug 9:S1058-2746(22)00604-8. doi: 10.1016/j.jse.2022.06.022. Online ahead of print.
15. Knighton TW, Chalmers PN, Sulkar HJ, Aliaj K, Tashjian RZ, Henninger HB. Reverse Total Shoulder Glenoid Component Inclination Affects Glenohumeral Kinetics During Abduction: A Cadaveric Study. *J Shoulder Elbow Surg.* 2022 Aug 2:S1058-2746(22)00603-6. doi: 10.1016/j.jse.2022.06.016. Online ahead of print.
16. Sulkar H, Aliaj K, Tashjian RZ, Foreman B, Henninger HB. Reverse shoulder arthroplasty alters humerothoracic scapulothoracic, and glenohumeral motion during weighted scaption. *Clin Orthop Relat Rsch.* 2022 Nov 1;480(11):2254-2265.
17. Erickson BJ, Chalmers PN, D'Angelo J, Rowe DG, Cohen S, Dugas JR. Performance and Return to Sport Following Meniscal Repair in Professional Baseball Players. *Orthop J Sports Med.* 2022 Jun 21;10(6):23259671221101914.

18. Frandsen JJ, Quinlan NJ, Smith KM, Lu CC, Chalmers PN, Tashjian RZ. Symptomatic Rotator Cuff Tear Progression: Conservatively Treated Full- and Partial-Thickness Tears Continue to Progress *Arthro Sport Med Rehabil*. 2022 Apr 20;4(3):e1091-e1096.
19. Chalmers PN, Mcelheny K, D'Angelo J, Ma K, Rowe D, Erickson BJ. Is Workload Associated With Hamstring and Calf Strains in Professional Baseball Players? An Analysis of Days of Rest, Innings Fielded, and Plate Appearances. *Sports Health*. 2022 May 19:19417381221093557. doi: 10.1177/19417381221093557. Online ahead of print.
20. Strony JT, LaBelle M, McMellen CJ, Golden ML, Chalmers P, Tashjian RZ, Gillespie RJ. Restoration of the Native Humeral Anatomy During Stemless Anatomic Total Shoulder Arthroplasty: A Radiographic Comparison of Intramedullary Versus Freehand Resection. *J Shoulder Elbow Surg*. 2022 Nov;31(11):2225-2232.
21. Knighton TW, Chalmers PN, Sulkar HJ, Aliaj K, Tashjian RZ, Henninger HB. Anatomic Total Shoulder Glenoid Component Inclination Affects Glenohumeral Kinetics During Abduction: A Cadaveric Study. *J Shoulder Elbow Surg*. 2022 Oct;31(10):2023-2033.
22. Smith KM, Hotaling JM, Presson AP, Zhang C, Horns JJ, Cannon-Albright LA, Teerlink CC, Tashjian RZ, Chalmers PN. The Effect of Sex Hormone Deficiency on the Incidence of Rotator Cuff Repair: Analysis of a Large Insurance Database. *J Bone Joint Surg Am*. 2022 May 4;104(9):774-779.
23. Mizels J, Erickson B, Chalmers P. Current State of Data and Analytics Research in Baseball. *Curr Rev Musculoskelet Med*. 2022 Aug;15(4):283-290.
24. Kawakami J, Yamamoto N, Itoi E, Henninger H, Tashjian RZ, Chalmers PN. Morphology of Glenoid Cartilage Defects in Anteroinferior Glenohumeral Instability. *Orthop J Sports Med*. 2022 Apr 4;10(4):23259671221086615.
25. Aliaj K, Foreman KB, Lawrence R, Chalmers PN, Henninger HB. Kinematic coupling of the glenohumeral and scapulothoracic joints generates humeral axial rotation. *J Biomech*. 2022 Mar 24;136:111059.
26. Chalmers PN, Christensen GV, Ishikawa H, Henninger HB, Kholmovski EG, Mills M, Tashjian RZ. Can Magnetic Resonance Imaging Accurately and Reliably Measure Humeral Cortical Thickness? *J Shoulder Elbow Surg Int*. 2021 Dec 11;6(2):297-304.
27. Erickson BJ, Chalmers PN, D'Angelo J, Ma K, Rowe D, Ciccotti MG, et al. Update on Performance and Return to Sport After Biceps Tenodesis in Professional Baseball Players. *Orthop J Sports Med*. 2022;10(2):23259671221074732
28. Chalmers PN, D'Angelo J, Ma K, Rowe D, Erickson BJ. How does the All-Star break affect injury rates in professional baseball? *JSES Reviews, Reports, & Techniques*. 2021;2(1):17-9.
29. Erickson BJ, Chalmers PN, D'Angelo, Ma K, Rowe D, Ciccotti MG, Dugas JR. Performance and Return to Sports After Meniscectomy in Professional Baseball Players. *Am J Sports Med*. 2022 Feb 11;3635465221074021. Online ahead of print. 2022 Mar;50(4):1006-1012.
30. Chalmers PN, Mcelheny K, D'Angelo J, Rowe D, Ma K, Curriero FC, Kvit A, Erickson BJ. Effect of Weather and Game Factors on Injury Rates in Professional Baseball Players. *Am J Sports Med*. 2022 Mar;50(4):1130-1136.
31. Smith KM, Wheelwright JC, Christensen GV, Ishikawa H, Tashjian RZ, Chalmers PN. COVID-19-related rotator cuff repair delay. *JSES Int*. 2022 Jan;6(1):79-83.
32. Chalmers PN, McElheny K, D'Angelo J, Ma K, Rowe D, Romeo AA, Erickson BJ. Is Workload Associated with Latissimus Dorsi and Teres Major Tears in Professional

- Baseball Pitchers? An Analysis of Days of Rest, Innings Pitched and Batters Faced. *J Shoulder Elbow Surg.* 2022 May;31(5):957-962.
33. Erickson BJ, Chalmers PN, D'Angelo J, Ma K, Rowe D, Ahmad CS. Do Injury Rates in Position Players Who Convert to Pitchers in Professional Baseball Differ From Players Who Have Always Been Pitchers? *Orthop J Sports Med.* 2021 Oct 25;9(10):23259671211050963.
 34. Tashjian RZ, Beck L, Stertz I, Chalmers PN. Preoperative three-dimensional computer planning for reverse total shoulder arthroplasty and bone grafting for severe glenoid deformity. *Shoulder Elbow.* 2021 Oct;13(5):492-501.
 35. Miller M, Kazmers NH, Chalmers PN, Tashjian RZ, Jurynech MJ. Supraspinatus Rotator Cuff Repair: A mouse model and technique. *Arthroscopy Techniques.* 2021 Jul 13;10(8):e1949-e1954.
 36. Smith KM, Presson AP, Zhang C, Horns JJ, Hotaling JM, Tashjian RZ, Chalmers PN. Does Diabetes Mellitus Associate with Revision Rotator Cuff Repair? *J Shoulder Elbow Surg Int.* 2021 Apr 20;5(4):636-641.
 37. Makhni E, Lizzio V, Chalmers PN. The Effect of the Crow Hop on Elbow Stress During an Interval Throwing Program: Response. *Am J Sports Med.* 2021 Jul;49(8):NP32-NP33.
 38. Quinlan N, Hillyard B, Tashjian RZ, Chalmers PN. Footprint Size Matters: Wider Coronal Greater Tuberosity Width is Associated with Increased Rates of Healing after Rotator Cuff Repair. *J Shoulder Elbow Surg Int.* 2021 Feb 20;5(3):486-492.
 39. Chalmers PN, Miller M, Wheelwright JC, Kawakami J, Henninger HB, Tashjian RZ. Acromial and Glenoid Morphology in Glenohumeral Osteoarthritis: A Three-Dimensional Analysis. *J Shoulder Elbow Int.* 2021 Mar 21;5(3):398-405.
 40. Croatin R, Smale K, Chalmers PN, Erickson BJ, Kaneoka K, Ishii M, Yanai T. Analysis of Injuries and Pitching Performance Between Major League Baseball and Nippon Professional Baseball: A 2-Team Comparison Between 2015 to 2019. *Orthop J Sports Med.* 2021 May 18;9(5):23259671211008810.
 41. Zmistkowski B, Carpenter D, Chalmers PN, Smith M, Keener J. Symptomatic Aseptic Loosening of a Short Humeral Stem Following Anatomic Total Shoulder Arthroplasty. *J Shoulder Elbow Surg.* 2021 May 18;S1058-2746(21)00429-8.
 42. Alajj K, Chalmers PN, Foreman B, Henninger HB. Beyond Euler/Cardan analysis: True glenohumeral axial rotation during arm elevation and rotation. *Gait and Posture.* 2021 Jul;88:28-36.
 43. Christensen GV, Smith KM, Kawakami J, Chalmers PN. Surgical Management of Superior Labral Tears in Athletes: Focus on Biceps Tenodesis. *Open Access J Sports Med.* 2021;12:61-71.
 44. Hadley C, Atlee TR, Chalmers PN, Bassora R, Bishop ME, Romeo AA, Erickson BJ. Velocity Increases From Flat-ground to Mound Work During a Lighter Baseball Training Program. *J Am Acad Orthop Surg.* 2021 Oct 1;29(19):827-831.
 45. Chalmers PN, Erickson BJ, Romeo AA. Latissimus dorsi and teres major injuries. *Op Tech Sports Med.* 2021 Mar; 29 (1):150805.
 46. O'Neill DC, Christensen GV, Hillyard B, Kawakami J, Tashjian RZ, Chalmers PN. Glenoid Retroversion Associates with Deltoid Muscle Asymmetry in Walch B-type Glenohumeral Osteoarthritis. *J Shoulder Elbow Surg Int.* 2020 Dec 11;5(2):282-287.
 47. Miller MS, Chalmers PN, Nyfeler J, Kawakami J, Konery K, Tashjian RZ. Rheumatoid Arthritis is Associated with Symptomatic Acromial and Scapular Spine Stress Fracture

- Following Reverse Total Shoulder Arthroplasty. *J Shoulder Elbow Surg Int.* 2020 Dec 7;5(2):261-265.
48. Nahhas CR, Chalmers PN, Parvizi J, Sporer SM, Deirmengian GK, Chen AF, Culvern C, Moric M, Della Valle CJ. A Randomized Trial of Status and Articulating Spacers for Treatment of the Infected Total Hip Arthroplasty. *Journal of Arthroplasty.* 2021 Jan 21:S0883-5403(21)00049-8.
 49. Henninger HB, Suter T, Chalmers PN. Editorial Commentary: Is Your Critical Shoulder Angle Accurate? Only If You Verify That You Have the Correct Images. *Arthroscopy.* 2021 Feb; 37(2):447-449.
 50. Tashjian RZ, Kazmers NH, Epperson RT, Chalmers PN, Williams DL, Jurynech MJ. The Effect of Estrogen-Like Compound on Rotator Cuff Tendon Healing in a Murine Model. *J Orthop Res.* 2021 Dec;39(12):2711-2724.
 51. Kolz C, Sulkar H, Aliaj K, Tashjian RZ, Chalmers PN, Qiu Y, Zhang Y, Foreman B, Anderson A, Henninger HB. Age-related differences in humerothoracic, scapulothoracic, and glenohumeral kinematics during elevation and rotation motions. *J Biomech.* 2021 Jan 23;117:110266.
 52. Smith DG, Lizzio VA, Guo E, Koolmees D, Swantek AJ, Gullledge CM, Chalmers PN, Makhni EC. The Impact of the Crow Hop on Elbow Stress during an Interval Throwing Program. *Am J Sports Med.* 2021 Feb;49(2):359-363.
 53. Tashjian RZ, Frandsen F, Christensen G, Chalmers PN. Conjoint Tendon Release for Persistent Anterior Shoulder Pain Following Reverse Total Shoulder Arthroplasty. *J Shoulder Elbow Surg Internat.* 2020 Jul 31;4(4):975-978.
 54. Tashjian RZ, Ross H, Granger E, Chalmers PN. Single Loop Allograft Reconstruction for Sternoclavicular Joint Instability. *J Shoulder Elbow Surg Internat.* 2020 Jul 15;4(4):719-723.
 55. Tashjian RZ, Christensen GV, Chalmers PN. What's New in Shoulder and Elbow Surgery. *J Bone Joint Surg Am.* 2020 Oct 21;102(20):1770-1776.
 56. Tashjian RZ, Broschinsky K, Kawakami J, Granger E, Chalmers PN. Effect of Complications on Outcomes after Revision Reverse Total Shoulder Arthroplasty. *J Shoulder Elbow Surg Internat.* 2020 Jun 10;4(3):662-668.
 57. Chamberlain AM, Orvets N, Patterson B, Chalmers PN, Gosselin M, Salazar D, Keener JD. Total Shoulder Arthroplasty with an Anterior Offset Humeral Head in Patients with a B2 Glenoid. *J Shoulder Elbow Surg International.* 2020 Jun 17;4(3):638-643.
 58. Chalmers PN, Hillyard B, Kawakami J, Christensen G, O'Neill D, Childress V, Tashjian RZ. Double-Loaded Suture Anchors in the Treatment of Anteroinferior Glenohumeral Instability. *J Shoulder Elbow Surgery International.* 2020 May 30;4(3):587-591.
 59. Erickson BJ, McElheny K, Chalmers PN, Carr J, D'Angelo J, Ma K, Goulis G, Lourie GM, Carlson MG. Performance and Return to Sport Following Excision of the Hook of the Hamate in Professional Baseball Players. *Am J Sports Med.* 2020 Oct;48(12):3066-3071.
 60. Frandsen, JJ, Tashjian RZ, Chalmers PN. Intrathoracic Central Glenoid Screw: A Case Report. *J Shoulder Elbow Surg.* 2020 Sep;29(9):e338-e340.
 61. Erickson BJ, Carr J, Vellois E, Chalmers PN, Altchek D. Ulnar Collateral Ligament Tear Location May Affect Return To Sport Rate But Not Performance Upon Return To Sport Following Ulnar Collateral Ligament Reconstruction Surgery In Professional Baseball Players. *Am J Sports Med.* 2020 Sep;48(11):2608-2612.

62. Tashjian RZ, Hillyard B, Childress V, Kawakami J, Presson AP, Zhang C, Chalmers PN. Outcomes After a Grammont-Style Reverse Total Shoulder Arthroplasty? *J Shoulder Elbow Surg.* 2021 Jan;30(1):e10-e17.
63. Kolz CW, Sulkar HJ, Alaij K, Tashjian RZ, Chalmers PN, Qiu Y, Zhang U, Foreman KB, Anderson AE, Henninger HB. Reliable interpretation of scapular kinematics depends on coordinate system definition. *Gait and Posture.* 2020 Sep;81:183-190.
64. Chalmers PN, Tashjian RZ. Patch Augmentation in Rotator Cuff Repair. *Curr Rev Musculoskeletal Med.* 2020 Oct; 13(5): 561-571.
65. Chalmers PN, Lindsay SR, Smith W, Kawakami J, Hill R, Tashjian RZ, Keener JD. Infraspinatus and Deltoid Length and Patient Height: Implications for Lateralization and Distalization in Reverse Total Shoulder Arthroplasty. *J Shoulder Elbow Surg.* 2020 Jul 22:S1058-2746(20)30611-X.
66. Chalmers PN, English J, Cushman DM, Zhang C, Presson AP, Yoon S, Schulz B, Li B. The Ulnar Collateral Ligament Responds to Stress in Professional Pitchers. *J Shoulder Elbow Surg.* 2021 Mar;30(3):495-503.
67. Tashjian RZ, Granger EK, Wang Y, Lee Y, Chalmers PN, Jones KB. Gene Expression in Torn Rotator Cuff Tendons Utilizing RNA Sequencing. *Orthop J Sports Med.* 2020 Jun 29;8(6):2325967120927480. doi: 10.1177/2325967120927480.
68. Erickson BJ, Atlee TR, Chalmers PN, Bassora R, Inzerillo C, Beharrie A, Romeo AA. The Interaction Between Age and Change in Velocity During a Baseball Training Program. *Orthop J Sports Med.* 2020 Jun 17;8(6):2325967120927939.
69. Erickson BJ, Chalmers PN, Denard P, Lederman E, Horneff G, Werner BC, Romeo AA. Does Commercially Available Shoulder Arthroplasty Preoperative Planning Software Agree With Surgeon Measurements Of Version, Inclination and Subluxation? *J Shoulder Elbow Surg.* 2020 Jun 13:S1058-2746(20)30473-0.
70. O'Neill D, Christensen G, Kawakami J, Tashjian RZ, Chalmers PN. Revision Anterior Glenohumeral Instability: Is Arthroscopic Treatment an Option? *J Shoulder Elbow Surg International.* 2020 May 7;4(2):287-291.
71. Chalmers PN, Uffman W, Christensen G, Greis P, Aoki S, Nelson R, Yoo M, Tashjian RZ. An Analysis of Costs Associated with the Arthroscopic Treatment of Glenohumeral Instability. *J Shoulder Elbow Surg Internat.* 2020 Mar 16;4(2):297-301.
72. Chalmers PN, Beck L, Kawakami J, Miller M, Dukas AG, Burks RT, Greis PE, Tashjian RZ. Acromial Morphology and Rotator Cuff Tearing and Rotator Cuff Repair Healing. *J Shoulder Elbow Surg.* 2020 Nov;29(11):2229-2239.
73. Dowdle B, Chalmers PN. Management of the Ulnar Nerve in Throwing Athletes. *Current Reviews in Musculoskeletal Medicine.* 2020 Aug;13(4):449-456.
74. Cvetanovich G, Beck EC, Chalmers PN, Espinoza Orias AA, Stover MD, Inoue N, Nho SJ. Three-dimensional computed tomography determination of in vivo hip translation in patients with femoroacetabular impingement. *Arthroscopy Sports Medicine, and Rehabilitation.* 2020 Jan 9;2(2):e113-e120.
75. Erickson BJ, Atlee TR, Chalmers PN, Bassora R, Inzerillo C, Beharrie A, Romeo AA. Training With Lighter Baseballs Increases Velocity Without Increasing Injury Risk. *Orthop J Sports Med.* 2020 Mar 26;8(3):2325967120910503.
76. Tashjian RZ, Beck L, Stertz I, Chalmers PN. Preoperative Three-Dimensional Computer Planning for Reverse Total Shoulder Arthroplasty and Bone Grafting For Severe Glenoid Deformity. *Shoulder and Elbow.* 2020 Mar 13. DOI:10.1177/1758573220908903

77. Erickson BJ, Chalmers PN, D'Angelo J, Ma K, Sheridan S, Schickendantz M, Romeo AA. Timing of Return to Batting Milestones After Ulnar Collateral Ligament Reconstruction in Professional Baseball Players. *Am J Sports Med.* 2020 May;48(6):1465-1470.
78. Erickson BJ, Chalmers PN, Denard PJ, Gobezie R, Romeo AA, Lederman ES. Current State of Short Stem Implants in Total Shoulder Arthroplasty: A Systematic Review of the Literature. *J Shoulder Elbow Surg International.* 2020 Jan 28;4(1):114-119.
79. Tashjian RZ, Shin J, Broschinsky K, Yeh C, Martin B, Chalmers PN, Greis PE, Burks RT, Zhang Y. Minimal clinically important differences in the ASES, Simple Shoulder Test and VAS pain scores after arthroscopic rotator cuff repair. *J Shoulder Elbow Surg.* 2020 Jul;29(7):1406-1411.
80. Nahhas CR, Chalmers PN, Parvizi J, Sporer SM, Berend KR, Moric M, Chen AF, Austin M, Deirmengian GK, Morris MJ, Della Valle CJ. A Randomized Trial of Static and Articulating Spacers for Treatment of Infected Total Knee Arthroplasty. *J Bone Joint Surg Am.* 2020 May 6;102(9):778-787.
81. Jacxsens M, Elhabian SY, Brady SE, Chalmers PN, Mueller AM, Tashjian RZ, Henninger HB. Thinking Outside the Glenohumeral Box: Hierarchical Shape Variation of the Periarticular Anatomy of the Scapula Using Statistical Shape Modeling. *J Orthop Res.* 2020 Oct;38(10):2272-2279.
82. Chalmers PN, Christensen G, O'Neill D, Tashjian RZ. Does Bone Loss Measurement Methodology in Glenohumeral Instability Alter Treatment? *Arthroscopy.* 2020 Jan;36(1):12-19.
83. Drew AJ, Taylor CE, Tashjian RZ, Chalmers PN, Henninger HB, Bachus KN. Initial Stability of a Percutaneous Osseointegrated Endoprosthesis with Proximal Interlocking Screws for Transhumeral Amputees. *Clin Biomech.* 2019 Dec 6;72:108-114.
84. Uffman WJ, Christensen GV, Yoo M, Nelson RE, Greis PE, Burks RT, Tashjian RZ, Chalmers PN. A Cost-Minimization Analysis of Intraoperative Costs in Arthroscopic Bankart Repair, Open Latarjet, and Distal Tibial Allograft. *Orthop J Sports Med.* 2019 Nov 21; 7(11):2325967119882001.
85. Kahn T, Chalmers PN. Proximal Humeral Bone Loss in Revision Shoulder Arthroplasty. *Orthop Clin North Am.* 2020 Jan;51(1):87-95.
86. Henninger HB, Christensen GV, Taylor CE, Stertz I, Tashjian RZ, Chalmers PN. Volumetric Measurement of Shoulder Girdle Musculature with Magnetic Resonance Imaging. *Clin Orthop Relat Rsch.* 2020 Apr;478(4):871-883.
87. Erickson BJ, Chalmers PN, Ma K, D'Angelo J, Dahm D, Romeo AA, Ahmad CS. Performance and Return to Sport Following Anterior Cruciate Ligament Reconstruction in Professional Baseball Players. *Orthop J Sports Med.* 2019 Oct 30;7(10):2325967119878431.
88. Tashjian RZ, Chalmers PN. What's New in Shoulder and Elbow Surgery. *J Bone Joint Surg.* 2019 Oct 16;101(20):1799-1805.
89. Chalmers PN. *Editorial Commentary:* Does a medialized repair allow single row to outperform double row rotator cuff repair? *Arthroscopy.* 2019 Oct;35(10):2814-2816.
90. Chauhan A, Chalmers PN, Ciccotti MG, Fronek J. Non-Operative Treatment of Elbow Ulnar Collateral Ligament Injuries with and without Platelet-Rich Plasma in Professional Baseball Players: A Comparative and Matched Cohort Analysis. *Am J Sports Med.* 2019 Nov;47(13):3107-3119.

91. Aleem AW, Chalmers PN, Tashjian RZ, Chamberlain AM, Keener JD. Association Between Rotator Cuff Muscle Size and Glenoid Deformity in Primary Glenohumeral Osteoarthritis. *J Bone Joint Surg.* 2019 Nov 6;101(21):1912-1920.
92. Tashjian RZ, Brochinsky K, Stertz I, Chalmers PN. Structural Glenoid Allograft Reconstruction During Reverse Total Shoulder Arthroplasty. *J Shoulder Elbow Surg.* 2020 Mar;29(3):534-540.
93. Chalmers PN, Beck L, Miller M, Stertz I, Henninger H, Tashjian RZ. Glenoid Deformity Associates with Rotator Cuff Muscle Size in those with and without Glenohumeral Osteoarthritis. *J Am Acad Orthop Surg.* 2020 Jul 1;28(13):547-555.
94. Erickson BJ, Chalmers PN, Zajac J, Sgroi T, Eno JJ, Altchek DW, Dines JS, Coleman SH. Do Professional Baseball Players with a Higher Valgus Carrying Angle Have an Increased Risk of Shoulder and Elbow Injuries? *Orthop J Sports Med.* 2019 Aug 27;7(8):2325967119866734.
95. Erickson BJ, Chalmers PN, Potter H, Altchek D, Romeo AA. Magnetic Resonance Imaging Grading System for Tears of the Latissimus Dorsi and Teres Major. *Orthop J Sports Med.* 2019 Mar 4;7(3):2325967119826548.
96. Erickson BJ, Chalmers PN, D'Angelo J, Ma K, Romeo AA. Performance and Return to Sport Following Rotator Cuff Surgery in Professional Baseball Players. *J Shoulder Elbow Surg.* 2019 Dec;28(12):2326-2333.
97. Erickson BJ, Chalmers PN, D'Angelo J, Ma K, Romeo AA. Open Reduction Internal Fixation of Medial Epicondyle Fractures After Ulnar Collateral Ligament Reconstruction in Professional Baseball Pitchers. *Orthop J Sports Med.* 2019 Jun 19;7(6):2325967119852896.
98. Chalmers PN, Beck L, Stertz I, Tashjian RZ. Hydrogen Peroxide Skin Preparation Reduces *Cutibacterium Acnes* in Shoulder Arthroplasty: A Prospective, Blinded, Controlled Trial. *J Shoulder Elbow Surg.* 2019 Aug;28(8):1554-1561.
99. Chalmers PN, Boileau P, Romeo AA, Tashjian RZ. Revision Reverse Shoulder Arthroplasty. *J Am Acad Orthop Surg.* 2019 Jun 15;27(12):426-436.
100. Chalmers PN, Suter T, Jacxsens M, Zhang Y, Zhang C, Tashjian RZ, Henninger HB. The influence of radiographic viewing perspective on glenoid inclination measurement. *J Shoulder Elbow Arthroplasty.* <https://doi.org/10.1177/2471549218824986>
101. Erickson BJ, Chalmers PN, D'Angelo J, Ma K, Ahmad CS, Romeo AA. Performance and Return to Sport Following Open Reduction Internal Fixation of the Olecranon in Professional Baseball Players. *Am J Sports Med.* 2019 Jul;47(8):1915-1920.
102. Chalmers PN, Granger E, Ross H, Burks RT, Tashjian RZ. Distal Clavicle Resection and Rotator Cuff Repair. *Orthop J Sports Med.* 2019 May 2;7(5):2325967119844295.
103. Erickson BJ, Chalmers PN, D'Angelo J, Ma K, Dines J, Romeo AA. Do Outcomes or Subsequent Injuries Differ Following Ulnar Collateral Ligament Reconstruction Using Palmaris vs. Hamstring Autograft. *Am J Sports Med.* 2019 May;47(6):1473-1479.
104. Kahn TL, Granger EK, Henninger HB, Tashjian RZ, Chalmers PN. Reverse Total Shoulder Arthroplasty and Resting Radiographic Scapular Rotation. *J Shoulder Elbow Surg.* 2019 Aug;28(8):e265-e270.
105. Jacxsens M, Elhabian S, Brady S, Chalmers PN, Tashjian RZ, Henninger HB. Coracoacromial Morphology: A Contributor to Recurrent Traumatic Anterior Glenohumeral Instability? *J Shoulder Elbow Surg.* 2019 Jul;28(7):1316-1325.e1.

106. Erickson BJ, Chalmers PN, D'Angelo J, Ma K, Romeo AA. Performance and Return to Sport Following Latissimus Dorsi and Teres Major Tears in Professional Baseball Pitchers. *Am J Sports Med.* 2019 Apr;47(5):1090-1095.
107. Erickson BJ, Chalmers PN, D'Angelo J, Ma K, Ahmad C, Dines J, Romeo AA. Side of Hamstring Graft Harvest Side Does Not Affect Performance or Return to Sport Rates and Does Not Increase Risk for Future Hamstring Injuries Following Ulnar Collateral Ligament Reconstruction in Professional Baseball Pitchers. *Am J Sports Med* 2019 Apr;47(5):1111-1116.
108. Chalmers PN, Erickson BJ, Ma K, D'Angelo J, Romeo AA. Epidemiology of Shoulder Surgery in Professional Baseball Players. *Am J Sports Med.* 2019 Apr;47(5):1068-1073.
109. Erickson BJ, Chalmers PN, D'Angelo J, Ma K, Romeo AA. Performance and Return to Sport Following Ulnar Nerve Decompression/Transposition in Professional Baseball Players. *Am J Sports Med.* 2019 Apr;47(5):1124-1129.
110. Chalmers PN, Kahn T, Broschinsky K, Ross H, Stertz I, Nelson R, Yoo M, Tashjian RZ. An Analysis of Costs Associated with Shoulder Arthroplasty. *J Shoulder Elbow Surg.* 2019 Jul;28(7):1334-1340. **Featured in Orthopaedics Today.** <https://www.healio.com/orthopedics/shoulder-elbow/news/online/%7B681640b0-990c-4ffc-a8c3-a093e8ead34f%7D/operative-costs-account-for-most-expenses-in-shoulder-arthroplasty>
111. Chalmers PN, Romeo AA, Nicholson GP, Boileau P, Keener JD, Gregory JM, Salazar DH, Tashjian RZ. Classification of Humeral Bone Loss in Revision Total Shoulder Arthroplasty. *Clin Orthop Relat Rsch.* 2019 Feb;477(2):432-441.
112. Henninger HB, Sulkar H, Chalmers PN, Tashjian RZ. Biomechanics of Two Methods of Scapular Neck Fracture Fixation in a Synthetic Bone Model. *Clin Biomech (Bristol, Avon).* 2018 Nov 22;61:64-69.
113. Chalmers PN, Salazar DH, Romeo AA, Keener JD, Yamaguchi K, Chamberlain AM. Introduction of Modern Reverse Total Shoulder Arthroplasty: A Comprehensive Analysis of a High-Volume Center. *J Amer Acad Orthop Surg.* 2018 Dec 15;26(24):e504-e510.
114. Tashjian RZ, Granger E, Chalmers PN. Healing Rates and Functional Outcomes after Triple-Loaded Single-Row Versus Transosseous Equivalent Double-Row Rotator Cuff Tendon Repair. *Orthop J Sports Med.* 2018 Nov 1;6(11):2325967118805365.
115. Tashjian RZ, Chalmers PN. What's New in Shoulder and Elbow Surgery. *J Bone Joint Surg Am.* 2018 Oct 17;100(20):1800-1806.
116. Tashjian RZ, Chalmers PN. Future Frontiers in Shoulder Arthroplasty and the Management of Shoulder Osteoarthritis. *Clin Sports Med.* 2018 Oct;37(4):609-630.
117. Erickson BJ, Chalmers PN, Newgren J, Nicholson GP, Romeo AA. Can the Kerlan Jobe Orthopaedic Clinic Shoulder and Elbow Score be Reliably Administered Over the Phone? A Randomized Study. *Orthop J Sports Med.* 2018 Aug 14;6(8):2325967118791510.
118. Tashjian RZ, Broschinsky K, Chalmers PN. Glenohumeral cerclage for salvage of recalcitrant instability after reverse total shoulder arthroplasty. *J Shoulder Elbow Surg.* 2018 Aug;27(8):e259-e263.
119. Rao AJ, Chalmers PN, Cvetanovich GL, O'Brien M, Newgren J, Cole BJ, Verma NN, Nicholson GP, Romeo AA. Does Pre-operative Doxycycline Reduce *Propionibacterium Acnes* in Shoulder Arthroplasty? *J Bone Joint Surg Am.* 2018 Jun 6;100(11):958-964.

120. Tashjian RZ, Martin B, Ricketts C, Henninger HB, Granger E, Chalmers PN. Superior Baseplate Inclination Is Associated With Instability After Reverse Total Shoulder Arthroplasty. *Clin Orthop Relat Resch*. 2018 Aug;476(8):1622-1629.
121. Chalmers PN, Beck L, Stertz I, Aleem A, Keener JD, Henninger HB, Tashjian RZ. Do Magnetic Resonance Imaging and Computed Tomography Provide Equivalent Measures of Rotator Cuff Muscle Size in Glenohumeral Osteoarthritis? *J Shoulder Elbow Surgery*. 2018 Oct;27(10):1877-1883.
122. Erickson BJ, Chalmers PN, Romeo AA, Ahmad CS. Relationship Between Pitching a Complete Game and Spending Time on the Disabled List in Major League Baseball Pitchers. *Orthop J Sports Med*. 2018 Mar 26;6(3):2325967118761354.
123. Chalmers PN, Beck L, Granger E, Henninger H, Tashjian RZ. Superior glenoid inclination associates with rotator cuff tears. *J Shoulder Elbow Surgery*. 2018 Mar 23. pii: S1058-2746(18)30124-1.
124. Chalmers PN, Ross H, Granger E, Presson AP, Zhang C, Tashjian RZ. Does Rotator Cuff Repair Alter Natural History? A Systematic Literature Review of Long-Term Outcomes. *J Bone Joint Surg Am Open Access*. February 2018:1-11.
125. Orvets ND, Chamberlain AM, Patterson BM, Chalmers PN, Gosselin M, Salazar D, Aleem AW, Keener JD. Total shoulder arthroplasty in patients with a B2 glenoid addressed with corrective reaming. *J Shoulder Elbow Surg*. 2018 Jun;27(6S):S58-S64.
126. Erickson BJ, Chalmers PN, Verma NN, Bach BR, Romeo AA, Ahmad CS. Reasons for and Time to Retirement Following Ulnar Collateral Ligament Reconstruction in Major League Baseball Pitchers. *Orthop J Sports Med*. 2017 Dec 21;5(12):2325967117745021.
127. Chalmers PN, Granger E, Nelson R, Yoo M, Tashjian RZ. Factors Affecting Cost, Outcomes and Tendon Healing After Arthroscopic Rotator Cuff Repair. *Arthroscopy*. 2018 May;34(5):1393-1400.
128. Chalmers PN, Sumner S, Romeo AA, Tashjian RZ. Do Elevated Inflammatory Markers Associate with Infection After Revision Shoulder Arthroplasty? *J Shoulder Elbow Arthroplasty*. January 29, 2018. Doi: 10.1177/2471549217750465.
129. Chalmers PN, Granger E, Orvets ND, Patterson B, Chamberlain AM, Keener JD, Tashjian RZ. Does Prosthetic Humeral Articular Surface Positioning Associate with Outcome after Total Shoulder Arthroplasty? *J Shoulder Elbow Surg*. 2018 May;27(5):863-870.
130. Frank RM, Chalmers PN, Moric M, Cole BJ, Romeo AA. Incidence and Trends of Shoulder Stabilization in the United States. *Arthroscopy*. 2018 Mar;34(3):784-792.
131. Chalmers PN, Erickson BJ, Verma NN, D'Angelo J, Romeo AA. Incidence and Return to Play of Biceps Tenodesis in Major League Baseball Players. *Arthroscopy*. 2018 Mar;34(3):747-751. d
132. Tashjian RZ, Granger E, Chalmers PN. Structural Glenoid Grafting During Primary Reverse Total Shoulder Arthroplasty Utilizing Humeral Head Autograft. *J Shoulder Elbow Surg*. 2018 Jan;27(1):e1-e8.
133. Erickson BJ, Chalmers PN, Verma NN, Zaferiou A, Romeo AA. Are the Hamstrings from the Drive Leg or Landing Leg More Active in Pitchers? An Electromyographic Study. *J Shoulder Elbow Surg*. 2017 Nov;26(11):2010-2016.
134. Erickson BJ, Chalmers PN, Dugas JR, Bach BR Jr, Nicholson GP, Verma NN, Ahmad CS, Romeo AA. Do Major League Baseball Team Physicians Harvest the Semitendinosus From the Drive Leg or Landing Leg When Performing Ulnar Collateral

- Ligament Reconstruction on Elite Baseball Pitchers? *Orthop J Sports Med.* 2017 Jul 3;5(7):2325967117713987
135. Boileau P, Morin-Salvo N, Gauci M-O, Seeto B, Chalmers PN, Holzer N, Walch G. Angled BIO-RSA: A Solution for the Management Glenoid Bone Loss and Erosion. *J Shoulder Elbow Surg.* 2017 Dec;26(12):2133-2142.
136. Cummings K, Cushman D, Chalmers P. Ulnar Collateral Ligament Injuries of the Elbow. *Current Physical Medicine and Rehabilitation Reports.* 2017:1-10.
137. Erickson BJ, Chalmers PN, Waterman BR, Griffin JW, Romeo AA. Performance and Return to Sport in Elite Baseball Players and Recreational Athletes Following Repair of the Latissimus Dorsi and Teres Major. *J Shoulder Elbow Surg.* 2017 Nov;26(11):1948-1954.
138. Chalmers PN, Salazar DH, Fingerman ME, Keener JD, Chamberlain AM. Continuous interscalene brachial plexus blockade is associated with reduced length of stay after shoulder arthroplasty. *Orthop Trauma Surg Rsch.* 2017 Oct;103(6):847-852.
139. Frank RM, Della Valle CJ, Plummer D, Chalmers PN, Cole BJ. Does Prior Cartilage Restoration Impact Outcomes Following Knee Arthroplasty? *Orthop Clin North America.* 2017 Jul;48(3):265-273.
140. Keener JD, Chalmers PN, Yamaguchi K. The Humeral Component in Shoulder Arthroplasty. *J Amer Acad Orthop Surg.* 2017 Jun;25(6):427-438. **Selected for presentation as a JAAOS webinar.**
141. Erickson BJ, Chalmers PN, Bach BR, Dines J, Verma NN, Bush-Joseph CA, Cohen S, Romeo AA. Length of Time Between Surgery and Return to Sport Following Ulnar Collateral Ligament Reconstruction in Major League Baseball Pitchers Does Not Predict Need for Revision Surgery. *J Shoulder Elbow Surg.* 2017 Apr;26(4):699-703
142. Erickson BJ, Chalmers PN, Axe MJ, Romeo AA. Effect of exceeding pitch limit recommendations and specialization as a pitcher on risk for UCLR in former LLWS Pitchers who played professional baseball. *Orthop J Sports Med.* 2017 Mar 24;5(3):2325967117695085.
143. Chalmers PN, Romeo AA. Arthroscopic Acromioplasty. *JBJS Essent Surg Tech,* 2016 Apr 13; 6 (2): e13 .
144. Hannon CP, Chalmers PN, Carpinello MF, Cvetanovich GL, Cole BJ, Bach BR Jr. Inconsistencies between physician-reported and industry-reported financial relationships in the Open Payment database. *J Bone Joint Surg Am.* 2016 Oct 19;98(20):e90.
145. Salazar DH, Chalmers PN, MacKinnon SE, Keener JD. Reverse Shoulder Arthroplasty After Radial to Axillary Nerve Transfer for Axillary Nerve Palsy with Concomitant Irreparable Rotator Cuff Tear. *J Shoulder Elbow Surg.* 2017 Jan;26(1):e23-e28.
146. Mellano CR, Thorsness R, Chalmers Pn, Terrance F, O'Donnell P, Cole BJ, Verma NN, Romeo AA, Nicholson GP. Functional Results of Bilateral Reverse Total Shoulder Arthroplasty. *J Shoulder Elbow Surg.* 2017 Jun;26(6):990-996.
147. Chalmers PN, Wimmer MA, Cvetanovich GL, Verma NN, Pearl ML, Cole BJ, Romeo AA. The Relationship Between Pitching Mechanics and Injury: A Current Concepts Review. *Sports Health.* 2017 May/Jun;9(3):216-221.
148. Cvetanovich GL, Saltzman BM, Chalmers PN, Cole BJ, Bach BR. Research Productivity of Sports Medicine Fellowship Faculty. *Orthop J Sports Med.* 2016 Dec 30;4(12):2325967116679393.

149. Kohan EM, Chalmers PN, Salazar DH, Keener JD, Yamaguchi K, Chamberlain AM. Dislocation Following Reverse Total Shoulder Arthroplasty. *J Shoulder Elbow Surg.* 2017 Jul;26(7):1238-1245.
150. Chalmers PN, Salazar DH, Chamberlain AM, Keener JD. Radiographic Characterization of the B2 Glenoid: Is Inclusion of the Entirety of the Scapula Necessary? *J Shoulder Elbow Surg.* 2017 May;26(5):855-860.
151. Chalmers PN, Salazar DH, Steger-May K, Chamberlain AM, Yamaguchi K, Keener J. Does the critical shoulder angle correlate with rotator cuff tear progression? *Clin Orthop Relat Resch.* 2017 Jun;475(6):1608-1617.
152. Chalmers PN, Salazar DH, Steger-May K, Chamberlain AM, Stobbs-Cucchi G, Yamaguchi K, Keener J. Radiographic Progression of Arthritic Changes in Shoulders with Degenerative Rotator Cuff Tears. *J Shoulder Elbow Surg.* 2016 Nov;25(11):1749-1755.
153. Chalmers PN, Salazar DH, Chamberlain AM, Keener JD. Radiographic Characterization of the B2 Glenoid: The Effect of Computed Tomographic Axis Orientation. *J Shoulder Elbow Surg.* 2017 Feb;26(2):258-264.
154. Erickson BJ, Chalmers PN, Cvetanovich G, Frank RM, Harris JD, Romeo AA. Quality and Quantity of the Elbow Arthroscopy Literature: A Systematic Review and Meta-Analysis. *Am J Orthop (Belle Mead NJ).* 2016 Jul-Aug;45(5):E290-E298.
155. Levy DM, Chalmers PN, Trenhaile SW, Bach BR Jr., Romeo AA, Verma NN. Massive Rotator Cuff Repair with All-Arthroscopic Patch Augmentation: Surgical Technique. *Tech Shoulder Elbow Surg.* 2016 June 17(2):83-87.
156. Riff A, Sgroi T, Chalmers PN, Lesniak M, Sayegh ET, Verma NN, Cole BJ, Romeo AA. Epidemiologic comparison of pitching mechanics, pitch type, and pitch counts among various levels of competition. *Arthroscopy.* 2016 Aug;32(8):1559-68.
157. Cvetanovich GL, Frank RM, Chalmers PN, Verma NN, Nicholson GP, Romeo AA. Surgical management of proximal humerus fractures: the emerging role of reverse total shoulder arthroplasty. *Orthopedics.* 2016 May 1;39(3):e465-73.
158. Cvetanovich GL, Chalmers PN, Mather RC III, Harris JD, Bush-Joseph CA, Nho SJ. Hip arthroscopy in the United States: surgical volume trends, 30-day post-operative morbidity and mortality. *Arthroscopy.* 2016 Jul;32(7):1286-92.
159. Chalmers PN, Erickson BJ, Ball B, Romeo AA, Verma NN. Fastball Pitch Velocity Helps Predicts Ulnar Collateral Ligament Reconstruction MLB Pitchers. *Am J Sports Med.* 2016 Aug;44(8):2130-5.
160. Erickson BJ, Chalmers PN, Bush-Joseph CA, Romeo AA. Predicting and Preventing Injury in Major League Baseball. *Am J Orthop (Belle Mead NJ).* 2016 Mar-Apr;45(3):152-156.
161. Erickson BJ, Sgroi T, Chalmers PN, Vignona P, Lesniak M, Bush-Joseph CA, Verma NN, Romeo AA. The Impact of Fatigue on Baseball Pitching Mechanics in Adolescent Male Pitchers. *Arthroscopy.* 2016 May;32(5):762-71.
162. Chalmers PN, Van Thiel GS, Trenhaile SW. Surgical Exposures of the Shoulder. *J Am Acad Orthop Surg.* 2016 Apr;24(4):250-258.
163. Chalmers PN, Verma NN. Proximal Biceps in Overhead Athletes. *Clinics in Sports Medicine.* 2016 Jan;35(1):163-79.
164. Chalmers PN, Keener JD. Expanding Roles for Reverse Shoulder Arthroplasty. *Curr Rev Musculoskelet Med.* 2016 Mar;9(1):40-8.

165. Cvetanovich GL, Chalmers PN, Verma NN, Cole BJ, Bach BR Jr. Risk factors for short-term complications of anterior cruciate ligament reconstruction in the United States. *Am J Sports Med.* 2016 Mar;44(3):618-24.
166. Cvetanovich GL, Chalmers PN, Verma NN, Nicholson GP, Romeo AA. Open reduction internal fixation has fewer short-term complications than shoulder arthroplasty for proximal humerus fractures. *J Shoulder Elbow Surg.* 2016 Apr;25(4):624-631.e3.
167. Cole BJ, Sayegh ET, Chalmers PN, Frank RM, Yanke AB, Verma NN, Cole BJ, Romeo AA, Bach BR Jr. Fixation of Soft Tissue to Bone: Techniques and Fundamentals. *J Amer Acad Orthop Surg.* 2016 Feb;24(2):83-95.
168. Erickson BJ, Chalmers PN, Bush-Joseph CA, Verma NN, and Romeo AA. Ulnar Collateral Ligament Reconstruction: A Systematic Review of the Literature. *Orthop J Sports Med.* 2015;3(12):2325967115618914
169. Chalmers PN, Verma NN. Wearable sensors and mobile motion analysis: the future of functional outcomes assessment? *Orthopedics.* 2015 Oct 1;38(10):594-6.
170. Chalmers PN, Cvetanovich GL, Kupfer N, Wimmer MA, Verma NN, Cole BJ, Romeo AA, Nicholson GP. The Champagne Toast Position Isolates the Supraspinatus: An Electromyographic Study of Shoulder Physical Examination Tests. *J Shoulder Elbow Surg.* 2016 Feb;25(2):322-9.
171. Chalmers PN, Walton DM, Sporer SM, Levine BR. Is there a role for synovial aspiration in the diagnosis of aseptic loosening after total knee arthroplasty? *J Bone Joint Surg Am.* 2015 Oct 7;97(19):1597-603.
172. Chalmers PN, Van Thiel GS, Ferry ST. Is skin tenting secondary to a displaced clavicle fracture more than a theoretical risk? A report of two pediatric cases. *Am J Orthop.* 2015 Oct;44(10):E414-E416.
173. Chalmers PN, Monson B, Frank RM, Mascarenhas R, Nicholson GP, Bach BR, Verma NN, Cole BJ, Romeo AA. Combined SLAP Repair and Biceps Tenodesis for Superior Labral Anterior Posterior tears: How Do Results Compare to SLAP Repair or Biceps Tenodesis Alone? *Knee Surgery, Sports Traumatology, and Arthroscopy.* 2016 Dec;24(12):3870-3876.
174. Erickson BJ, Harris JD, Chalmers PN, Bach BR Jr., Verma NN, Bush-Joseph CA, and Romeo AA. Ulnar Collateral Ligament Reconstruction: Anatomy, Indications, Techniques, and Outcomes. *Sports Health.* 2015 Nov;7(6):511-7.
175. Cvetanovich GL, Chalmers PN, Bach BR Jr. Physician Payment Sunshine Act Industry Payment Reporting in Orthopaedic Surgery: Analysis and Comparison to Other Specialties. *J Bone Joint Surg Am.* 2015 Aug 5;97(15):1288-95.
176. Cvetanovich GL, Chalmers PN, Streit JJ, Romeo AA, Nicholson GP. Patients Undergoing Total Shoulder Arthroplasty on the Dominant Extremity Attain Greater Postoperative ROM. *Clin Orthop Relat Res.* 2015 Oct;473(10):3221-5.
177. Chalmers PN, Sgroi T, Riff AJ, Lesniak M, Sayegh ET, Verma NN, Cole BJ, Romeo AA. Correlates with History of Injury in Youth and Adolescent Pitchers. *Arthroscopy.* 2015 Jul;31(7):1349-57.
178. Sgroi T, Chalmers PN, Riff AJ, Lesniak M, Sayegh ET, Wimmer MA, Verma NN, Cole BJ, Romeo AA. Predictors of throwing velocity in youth and adolescent pitchers. *J Shoulder Elbow Surg.* 2015 Sep;24(9):1339-45.
179. Gupta AK, Chalmers PN, Klosterman E, Harris JD, Bach BR, Verma NN, Cole BJ, Romeo AA. Subpectoral Biceps Tenodesis for Superior Labrum Anterior-Posterior (SLAP) Tears. *Orthopedics.* 2015 Jan 1;38(1):e48-53.

180. Chalmers PN, Saltzman BM, Feldheim TF, Mascarenhas R, Mellano CR, Cole BJ, Romeo AA, Nicholson GP. A comprehensive analysis of pectoralis major transfer for long thoracic nerve palsy. *J Shoulder Elbow Surg.* 2015 Jul;24(7):1028-35. *Featured in Orthopedics Today.*
181. Sayegh E, Mascarenhas R, Chalmers PN, Cole BJ, Romeo AA, Verma NN. Surgical Treatment Options for Glenohumeral Arthritis in Young Patients: A Systematic Review and Meta-Analysis. *Arthroscopy.* 2015 Jun;31(6):1156-1166.e8.
182. Chalmers PN, Trombley R, Cip J, Monson B, Forsythe B, Nicholson GP, Bush-Joseph CA, Cole BJ, Wimmer MA, Romeo AA, Verma NN. Post-operative Restoration Of Upper Extremity Motion and Neuromuscular Control During The Overhand Pitch: Evaluation Of Tenodesis And Repair For SLAP Tears. *Am J Sports Med.* 2014 Dec;42(12):2825-36.
183. Saltzman BM, Chalmers PN, Mascarenhas R, Cole BJ, Romeo AA. Upper Extremity Physeal Injuries in Adolescent Baseball Pitchers. *Phys Sportsmed.* 2014 Sep;42(3):100-11.
184. Chalmers PN, Slikker W, Mall NA, Gupta AK, Rahman Z, Enriquez D, Nicholson GP. Author reply: Reverse total shoulder for acute proximal humeral fracture: Comparison to open reduction internal fixation and hemiarthroplasty. *J Shoulder Elbow Surg.* 2014 Sep;23(9):e222.
185. Mall NA, Chalmers PN, Moric M, Tanaka MJ, Cole BJ, Bach BR, Paletta GA. Incidence and Trends of Anterior Cruciate Ligament Reconstruction in the United States. *Am J Sports Med.* 2014 Oct;42(10):2363-70.
186. Yanke AB, Chalmers PN, Frank RM, Karas V, Friel NA, Cole BJ. Prospective evaluation of meniscal allograft transplantation revision: a minimum of 2-year follow-up. *Arthroscopy.* 2014 Dec;30(12):1602-8.
187. Chalmers PN, Mascarenhas R, Leroux T, Sayegh ET, Verma NN, Cole BJ, Romeo AA. Do arthroscopic and open stabilization techniques restore equivalent stability to the shoulder in the setting of recurrent anterior glenohumeral instability? : A systematic review of overlapping meta-analyses. *Arthroscopy.* 2015 Feb;31(2):355-363.
188. Sayegh ET, Mascarenhas R, Chalmers PN, Cole BJ, Verma NN, Romeo AA. Allograft Reconstruction for Glenoid Bone Loss in Glenohumeral Instability: A Systematic Review. *Arthroscopy.* 2014 Dec;30(12):1642-1649.
189. Saltzman BM, Chalmers PN, Gupta AK, Romeo AA, Nicholson GP. Complication Rates Comparing Primary to Revision Reverse Total Shoulder Arthroplasty. *J Shoulder Elbow Surg.* 2014 Nov;23(11):1647-54.
190. Frank RM, Chalmers PN, McNeil J, Romeo AA, Provencher MT. Distal Tibial Allograft for Management of Anterior Glenoid Bone Loss. *Orthop Knowl Online J* 2014;12(6): http://orthoportal.aaos.org/oko/article.aspx?article=OKO_SHO055. Accessed May 27, 2014.
191. Mascarenhas R, Chalmers PN, Sayegh ET, Bhandari M, Verma NN, Cole BJ, Romeo AA. Is Double-Row Rotator Cuff Repair Clinically Superior to Single-Row Rotator Cuff Repair: A Systematic Review of Overlapping Meta-analyses. *Arthroscopy.* 2014 Sep;30(9):1156-1165.
192. Frank J, Chalmers PN, Sporer SM. Management of infection following total hip arthroplasty. *Curr Orthop Practice.* 25 (3), 261-265.

193. Chalmers PN, Cip J, Trombley R, Cole BJ, Wimmer MA, Romeo AA, Verma NN. Glenohumeral function of the long-head of the biceps muscle: an electromyographic analysis. *Orthop J Sports Med* Feb 2014; vol. 2, 2: 2325967114523902.
194. Chalmers PN, Mall NA, Moric M, Sherman SL, Paletta GP, Cole BJ, Bach BR. Does anterior cruciate ligament reconstruction alter natural history?: A systematic review of long-term outcomes. *J Bone Joint Surg.* 2014; 96(4), 292–300.
195. Chalmers PN, Sporer SM, Levine BR. Author Reply: "Correlation of Aspiration Results with Periprosthetic Sepsis in Revision Total Hip Arthroplasty" *J Arthroplasty.* 2014 Feb;29(2):438-42.
196. Frank RM, Ramirez, J, Chalmers PN, McCormick FM, Romeo AA. Scapulothoracic Anatomy and Snapping Scapula Syndrome. *Anat Res Int.* 2013:635628. Epub 2013 Nov 28.
197. Sherman SL, Erickson BJ, Cvetanovich GL, Chalmers PN, Farr J, Bach BR, Cole BJ. Tibial Tuberosity Osteotomy: Indications, Techniques, Outcomes. *Am J Sports Med.* 2013 Nov 6;42(8):2006-2017.
198. Chalmers PN, Rahman Z, Romeo AA, Nicholson GP. Early dislocation following reverse total shoulder arthroplasty. *J Shoulder Elbow Surg.* 2014 May;23(5):737-44.
199. Chalmers PN, Gupta AK, Rahman Z, Enriquez D, Bruce B, Romeo AA, Nicholson GP. Predictors of Early Complications of Total Shoulder Arthroplasty. *J Arthroplasty.* 2014 Apr;29(4):856-60.
200. Chalmers PN, Frank RM, Gupta AK, Yanke AB, Trenhaile SW, Bach BR, Romeo AA, Verma NN. All-Arthroscopic Patch Augmentation of a Massive Rotator Cuff Tear: Surgical Technique. *Arthroscopy Tech.* 2013 Nov 1;2(4):e447-51.
201. Chalmers PN, Slikker W, Mall NA, Gupta AK, Rahman Z, Enriquez D, Nicholson GP. Reverse total shoulder for acute proximal humeral fracture: Comparison to open reduction internal fixation and hemiarthroplasty. *J Shoulder Elbow Surg.* 2014 Feb;23(2):197-204.
202. Gupta AK, Chalmers PN, Klosterman E, Harris JD, Provencher MT, Romeo AA. Arthroscopic Distal Tibial Allograft Augmentation for Posterior Glenoid Bone Loss. *Arthroscopy Tech.* 2013 Oct 10;2(4):e405-11.
203. Gupta AK, Chalmers PN, Rahman Z, Bruce B, Harris JD, McCormick F, Abrams GD, Nicholson GP. Reverse Total Shoulder Arthroplasty in Patients of Varying Body Mass Index. *J Shoulder Elbow Surg.* 2014 Jan;23(1):35-42.
204. Cvetanovich GL, Chalmers PN, Yanke AB, Gupta AK, Klosterman E, Verma NN, Romeo AA. Feasibility of an Osteochondral Allograft for Biologic Glenoid Resurfacing. *J Shoulder Elbow Surg.* 2014 Apr;23(4):477-84.
205. McCormick F, Bhatia S, Chalmers P, Gupta A, Verma N, Romeo A. Type II SLAP Tear: Repair or tenodesis? *Orthopedic Clinics of North America.* 2014 Jan;45(1):121-8.
206. Frank JM, Frank RM, Chalmers PN, Haughom B, Nho SJ. Lymphoma as a mimicker of femoroacetabular impingement: A Case Report. *J Bone Joint Surg Case Connector* 2013 Aug 28;3(3):e86 1-4.
207. Frank RM, Chalmers PN, Cole BJ, Gitelis S. Osteoid Osteoma of the Intercondylar Notch: An Uncommon Cause of Knee Stiffness. *J Knee Surg Reports.* Epub 16 Aug 2013.
208. Chalmers PN, Sporer SM, Levine BR. Correlation of aspiration results with periprosthetic sepsis in revision total hip arthroplasty. *J Arthroplasty.* 2014 Feb;29(2):438-42.

209. Chalmers PN, Sporer SM, Levine BR. Correlation of aspiration results with aseptic loosening in total hip arthroplasty. *J Arthroplasty*. 2013 Oct;28(9):1671-6.
210. Chalmers PN, Yanke AB, Cvetanovich GL, Verma NN, Romeo AA: Arthroscopic and open biceps tenodesis distal to the intertubercular groove. *Orthopaedic Knowledge Online Journal* 2013;11(7):
http://orthoportal.org/oko/article.aspx?article=OKO_SPO076. Accessed July 1, 2013.
211. Chalmers PN, Mall NA, Cole BJ, Verma NN, Bush-Joseph CA, Bach BR. Anteromedial versus transtibial tunnel drilling in anterior cruciate ligament reconstructions: A systematic review. *Arthroscopy*. 2013 Jul;29(7):1235-42.
212. Mall NA, Foley ES, Chalmers PN, Cole BJ, Romeo AA, Bach BR. Degenerative joint disease of the acromioclavicular joint: a review. *Am J Sports Med*. 2013 Nov;41(11):2684-92.
213. Erickson B, Chalmers PN, Yanke AB, Cole BJ. Surgical Management of Osteochondritis Dissecans of the Knee *Curr Rev Musc Med*. 2013 Jun;6(2):102-14.
214. Chalmers PN, Vigneswaran H, Harris JD, Cole BJ. The Role of Articular Cartilage Surgery in Athletes' Knees: A Systematic Review. *Cartilage*. 2013 Jul; 4(3):193-203.
215. Gross CET, Chalmers PN, Ellman MB, Fernandez JJ, Verma NN. Acute Brachial Plexopathy after Clavicle Open Reduction Internal Fixation. *J Shoulder Elbow Surg*. 2013 May;22(5):e6-9.
216. Chalmers PN, Hammond J, Juhan T, Romeo AA. Revision posterior shoulder stabilization. *J Shoulder Elbow Surg* 2013 Sep;22(9):1209-20.
217. Chalmers PN, Mall NA, Bach BR Jr. Contemporary ACL Outcomes: Does Technique Really Matter? *Op Tech Sports Med*. 2013 March; 21(1): 55-63.
218. Bhatia S, Chalmers PN, Yanke AB, Verma NN. Technical note: Arthroscopic suprascapular nerve decompression via a trans-articular and subacromial approach. *Arthroscopy Tech*. 2012 Dec;1(2):e187-e192.
219. Gross CET, Chalmers PN, Van Thiel G, Cole BJ, Romeo AA. Operative treatment of chondral defects in the glenohumeral joint: a systematic review. *Arthroscopy*. 2012 Dec;28(12):1889-901.
220. Chalmers PN, Ellman M, Verma NN. Injection Therapy in the Management of Musculoskeletal Injuries of the knee. *Op Tech Sports Med*. 2012 June;20(2):172-184.
221. Chalmers PN, Karas V, Sherma SL, Cole BJ. Return to High-Level Sport Following Meniscal Allograft Transplantation. *Arthroscopy*. 2013 Mar;29(3):539-44.
222. Sporer SM, Chalmers PN, Cutaneous Manifestation of Metallosis in a Metal-on-Metal Total Hip Arthroplasty After Acetabular Liner Dissociation: A Case Report. *J Arthroplasty*. 2012 Sep;27(8):1580.e13-6.
223. Chalmers PN, Frank JM, Sporer SM. Acute Postoperative Renal Failure Following Insertion of Antibiotic Impregnated Cement Spacer in Revision Total Joint Arthroplasty: Two Case Reports and a Review of the Literature. *J Bone Joint Surg Case Connector*. 2012 Mar 28;2(1):e12 1-4.
224. Sherman SL, Chalmers PN, Yanke AB, Bush-Joseph CA, Cole BJ, Bach BR Jr. Graft Tensioning During Knee Ligament Reconstruction: Principles and Practice. *J Amer Acad Orthop Surg*. 2012 Oct;20(10):633-45.
225. Bhatia S, Hsu A, Lin E, Chalmers PN, Ellman M, Cole BJ, Verma NN. Surgical treatment options for the young and active middle-aged patient with glenohumeral arthritis, *Adv in Orthop*. 2012;2012:846843.

226. Chalmers PN, Yanke AB, Karas V, Sherman SL, Cole BJ: Combined cartilage restoration and distal realignment for patellar and trochlear chondral lesions. American Academy of Orthopaedic Surgeons Web site: *Orthop Knowl Online* 2011;9(12): http://orthoportal.aaos.org/oko/article.aspx?article=OKO_SPO069. Accessed July 1, 2013.
227. Simcock XC, Yoon RS, Chalmers P, Geller JA, Kiernan HA, Macaulay W. Intraoperative music reduces perceived pain after total knee arthroplasty: a blinded, prospective, randomized, placebo-controlled clinical trial. *J Knee Surg*. 21:275-8. 2008.
228. Chalmers PN, Sherman SL, Raphael BS, Su EP. Rheumatoid Synovectomy: Does the Surgical Approach Matter? *Clin Orthop Relat Res*. 2011 Jul;469(7):2062-71.
229. Osbahr DC, Chalmers PN, Frank JS, Williams RJ 3rd, Widmann RF, Green DW. Acute, avulsion fractures of the medial epicondyle while throwing in youth baseball players: a variant of Little League elbow. *J Shoulder Elbow Surg*. 2010 Oct;19(7):951-7.
230. Kim HJ, Chalmers PN, Morris CD. Pediatric osteogenic sarcoma. *Curr Opin Pediatr*. 2010 Feb;22(1):61-6.
231. Green DW, Mogeckwu N, Scher DM, Handler S, Chalmers P, Widmann RF. A modification of Klein's Line to improve sensitivity of the anterior-posterior radiograph in slipped capital femoral epiphysis. *J Pediatr Orthop*. 2009 Jul-Aug;29(5):449-53.

Publications in non-peer reviewed resources

Published

1. Chalmers PN. Perspective on “Effect of a 6-Week Weighted Baseball Throwing Program on Pitch Velocity, Pitching Arm Biomechanics, Passive Range of Motion, and Injury Rates” by Reinold et al. *Sports Health* 2018;10(4):327-333.
2. Chalmers PN. Perspective on “Efficacy of a Prevention Program for Medial Elbow Injuries in Youth Baseball Players” by Sakata et al. *Am J Sports Med*. 2018;46(2):460–469.
3. Chalmers PN. Perspective on “Baseball Players With an Ulnar Collateral Ligament Tear Display Increased Nondominant Arm Humeral Torsion Compared With Healthy Baseball Players” by Meyer, Garrison, and Conway, *Am J Sports Med*. 2017 Jan;45(1):144-149. doi: 10.1177/0363546516664718. Web site: Orthopedics Today. February 2017.
4. Chalmers PN, Botero HG, Meyer J, Frank JM, Sporer SM, Levine BR. Computed tomography for the diagnosis of periprosthetic sepsis. *Rush Orthopaedic Journal*. 2015 edition.
5. Chalmers PN, Riboh J, Romeo AA. A 35-year-old man with left shoulder weakness. Web site: Orthopedics Today. February 2015. <http://www.healio.com/orthopedics/shoulder-elbow/news/print/orthopedics-today/%7B150c0225-bd5e-4a04-be1a-eec41992dafa%7D/a-35-year-old-man-with-left-shoulder-weakness>. Accessed February 14, 2015.
6. Wuetz TH, Bhatia S, Chalmers PN, Nho SJ. A 77-year-old woman with left hip pain and weakness. Web site: Orthopedics Today. September 2014: <http://www.healio.com/orthopedics/sports-medicine/news/print/orthopedics-today/{98d1167e-194c-4b13-9d00-5841c4da8132}/a-77-year-old-woman-with-left-hip-pain-and-weakness>. Accessed September 14, 2014.

7. Chalmers PN, Al-Shihabi L, Ferry ST. A 12-year-old boy with a right knee injury. Web site: *Orthopedics Today*. December 2013: <http://www.healio.com/orthopedics/knee/news/print/orthopedics-today/{b4e9c076-b0d5-4c69-b91d-bc31d7dc897c}/a-12-year-old-boy-with-a-right-knee-injury>. Accessed August 1, 2014.
8. Chalmers PN, Frank RM, Romeo AA, Cohen MS. Arthroscopic Treatment of Lateral Epicondylitis. Web site: *Orthopedics Today*. December 2013: <http://www.healio.com/orthopedics/shoulder-elbow/news/print/orthopedics-today/%7B3f3dd32b-ac4c-441e-8c45-17420a9cb637%7D/a-59-year-old-woman-with-right-shoulder-pain>. Accessed December 7, 2013.
9. Lee S, Chalmers PN, Nho SJ. A 59-year-old Woman with Right Shoulder Pain. Web site: *Orthopedics Today*. December 2013: <http://www.healio.com/orthopedics/shoulder-elbow/news/print/orthopedics-today/{bdc4c421-fd4c-4bd1-9900-738c8138cd09}/lateral-epicondylitis-treated-arthroscopically>. Accessed December 7, 2013.

Funding

1. Chalmers PN (PI), Tashjian RZ, Presson AP, Hotaling JM. Sex Hormone Supplementation and Rotator Cuff Repair: A Preliminary Randomized Trial. National Institute of Arthritis and Musculoskeletal and Skin Diseases. National Institute of Health. December 1, 2022. R21 AR081006-01A1. \$608,734
2. Bowman E, Chalmers PN. Management of Ulnar Collateral Ligament Injuries in Throwers: A Prospective Multicenter Cohort. *American Orthopaedic Society for Sports Medicine*. December 1, 2022. \$100,000.
3. Chalmers PN. Symptomatic Hypogonadism in Rotator Cuff Repair. *LS Peery Foundation*. August 1, 2022. \$15,000.
4. Chalmers PN. Indications for Ulnar Collateral Ligament Repair. *LS Peery Foundation*. January 1, 2022. \$19,999.96.
5. Chalmers PN, Jurynek M, Tashjian RZ. Validation of LC/MS-MS for Rat Tissue Hormone Levels. *LS Peery Foundation*. December 1, 2021. \$15,000.
6. Chalmers PN, English J, Camp C, Smale K, Ishikawa H, Reinold M. The effect of a weighted ball program on the ulnar collateral ligament: How quickly does the ligament adapt? *Major League Baseball Research Committee*. October 23, 2021. \$43,492.
7. Ishikawa H, Tashjian RZ, Henninger HB, Chalmers PN. Effect of Shoulder Muscles on Glenohumeral Stability: A Cadaveric Study. *LS Peery Foundation*. October 1, 2021. \$15,000.
8. Chalmers PN, Tashjian RZ. Does Arthroscopic Labral Repair Surgery in Anteroinferior Shoulder Instability Cause Chondral Injury? *LS Peery Foundation*. June 1, 2020. \$14,465.
9. Chalmers PN, Tashjian RZ. Does Acromial Morphology Associate with Glenohumeral Osteoarthritis? *LS Peery Foundation*. June 1, 2020. \$14,816
10. Chalmers PN, Tashjian RZ. Rotator Cuff Repair Delay: Does It Influence Outcomes? *LS Peery Foundation*. April 15, 2020. \$14,579
11. Chalmers PN, Makhni E, Erickson BJ, Schultz B, Li B. A Prospective Study of Youth and Adolescent Injury Rates: Can Injuries Be Predicted? *Major League Baseball Research Committee*. August 2, 2018. \$22,954

12. Chalmers PN, English J, Yoon S, Schultz, B, Li B. A Longitudinal Prospective Ultrasonographic Study of Ulnar Collateral Ligament: Does the Ligament Heal? *Major League Baseball Research Committee*. September 20, 2017. \$18,677
13. Chalmers PN, Tashjian RZ, Henninger, H. The effect of glenoid component inclination upon passive range of motion and bone-implant shear stress in shoulder arthroplasty: a biomechanical analysis. *LS Peery Foundation*. June 1, 2017. \$109,200
14. Chamberlain AM, Chalmers PN, Yamaguchi K, Tashjian RZ, Keener JD. Supervised physiotherapy versus a home exercise program after reverse total shoulder arthroplasty: a randomized clinical trial. *Orthopaedic Research and Education Foundation*. April 12, 2017. \$100,000.
15. Erickson BJ, Chalmers PN, Cole BJ, Verma NN, Bush-Joseph CA, Romeo AA. Fatigue in the Adolescent Pitcher. *Mid-America Orthopaedic Association*. August 27, 2014. \$4,000.
16. Chalmers PN, Wimmer M, Verma NN, Nicholson GP, Romeo AA. Improving shoulder arthroplasty: Postoperative neuromuscular function. Private Philanthropic Grant. June, 2014 \$150,000.
17. Chalmers PN, Levine BR. Educational Grant to present “Incidence and Trends of Anterior Cruciate Ligament Reconstruction in the United States.” *Mid-America Orthopaedic Association*. December 23, 2013. \$2,500.
18. Chalmers PN, Wimmer M, Verma NN, Cole BJ, Romeo AA. Function of the long head of the biceps muscle in kinematics of the glenohumeral joint during the overhand throw: evaluation of tenodesis for SLAP tears. *Arthroscopy Association of North America*. January 28, 2013. \$5,000.
19. Chalmers PN, Wimmer M, Verma NN, Cole BJ, Romeo AA. Function of the long head of the biceps muscle in kinematics of the glenohumeral joint during the overhand throw: evaluation of tenodesis for SLAP tears. *KFx Medical, Inc*. September 26, 2012. \$3,000.
20. Chalmers PN, Sporer SM, Levine BR. Correlation of Aspiration Results in Predicting the Etiology of Revision in Non-Infected Total Hip and Knee Arthroplasty. *Biomet, Inc*. July 26, 2012. \$2,000
21. Chalmers PN, Al-Shihabi L, Romeo AA, Bach BR Jr. Residency Enhancement via Guest Speaker Events and Resident Course attendance. *Orthopaedic Research and Education Foundation*. Feb 7, 2012. \$3,380. Used the funding to coordinate the 2012 OREF/Andersson lectureship, a day-long symposium for the Rush Orthopaedic Residency with Dr. James R. Andrews of the American Sports Medicine Institute in Birmingham, AL.
22. Chalmers PN, Virkus WW. Arbeitsgemeinschaft für Osteosynthesefragen, Basic Principles of Operative Fracture Management Course Scholarship. *Synthes, Inc*. \$2,265.

Total funding to date: \$1,264,062

Patents

1. Tashjian RZ, Chalmers PN, Fallin TW, Hotaling JM. Improved enthesis healing. Application number 17099224 U. S. Patent Office. Filed 16 November 2020.

Book Chapters

1. Parkes C, Chalmers PN. Classifying Humeral Bone Loss in Revision Shoulder Arthroplasty. *Revision Shoulder Arthroplasty*. Ed. Franceschi F. Springer: NY, NY.
2. Leafblad N, Chalmers PN. Chapter 84 Arthritis and Arthroplasty of the Elbow. *AAOS Comprehensive Orthopaedic Review 4*. AAOS: Rosemont, IL.
3. Caragea M, Conger A, Quinlan N, Chalmers PN, McCormick Z. Chapter 61: Persistent Post-arthroplasty Pain. *Common Pain Conditions: Fundamentals and Practical Diagnosis & Treatment*. Ed. Hunter CW, Deer TR, Hagedorn JJ, Lamer T. Springer: Chennai, India.
4. Quinlan N, Chalmers PN. Elbow. *Orthopaedic Knowledge Update 14*. Ed. Chamberlain AM. AAOS: Rosemont, IL.
5. Chalmers PN. Forward. *Pitching Biomechanics: 1st Edition*. Ed. Keyes B, Blitzblau A. Create Space: Scott's Valley, CA.
6. Christensen GC, Chalmers PN. Recent Clinical Research in Baseball Pitching. *Pitching Biomechanics: 1st Edition*. Ed. Keyes B, Blitzblau A. Create Space: Scott's Valley, CA.
7. Smith K, Chalmers PN. Imaging of the Rotator Cuff. *AAOS Resident Curriculum*. Ed. Keener J. AAOS: Rosemont, IL.
8. Christensen GC, Chalmers PN. Medial Epicondyle Apophysitis. *Elbow Ulnar Collateral Ligament Injury: A guide to Diagnosis and Treatment, 2nd Edition*. Ed. Dines JS, Camp CL, Altchek DW. Springer Nature: NY, NY.
9. Dukas A, Chalmers PN. Little Leaguer's Elbow/ Medial Epicondyle Fractures (Skeletally Immature) *Sports-Related Conditions of the Elbow*. Ed. Romeo AA, Erickson BJ. SLACK Incorporated: Thorofare, NJ.
10. Chalmers PN, Kawakami J. The role of the biceps tendon in the overhead athlete. *The Management of Biceps Pathology: A Clinical Guide from the Shoulder to the Elbow* Ed. Romeo AA, Erickson BJ, Griffin J. SLACK Incorporated: Thorofare, NJ.
11. Chalmers PN, Cvetanovich GL. Glenosphere Design. *Reverse Shoulder Arthroplasty: A Comprehensive Case-Based Approach*. Ed. Abboud J. SLACK Incorporated: Thorofare, NJ.
12. Erickson BJ, Chalmers PN, Romeo AA. Biceps Tenotomy and Tenodesis. *Atlas of Essential Orthopaedic Procedures 2*. Ed. Romeo AA. Wolters Kluwer Health: NY, NY.
13. Chalmers PN. Arthritis and Arthroplasty of the Elbow. *AAOS Comprehensive Orthopaedic Review*. Ed. Keener JD and Omid R. Wolters Kluwer Health: NY, NY.
14. Erickson BJ, Chalmers PN, Ahmad CS, Andrews JR. Prevention of Youth Pitching Injuries. A Chapter for *Baseball Sports Medicine*. Ed. Romeo AA and Ahmad CS. Wolters Kluwer Health: NY, NY.
15. Chalmers PN. "Management of Large Glenoid Defects – Bone Grafts and Augmented Components" A chapter for *Complex and Revision Shoulder Arthroplasty: An Evidence-Based Approach to Evaluation and Management* Ed. Tashjian RZ. Springer Nature: NY, NY.
16. Kahn T, Chalmers PN. Little Leaguer's Shoulder. A Chapter for *Baseball Sports Medicine*. Ed. Romeo AA and Ahmad CS. Wolters Kluwer Health: NY, NY.
17. Chalmers PN, Erickson BJ. Adolescent pitching mechanics and pitch counts. A Chapter for *Baseball Sports Medicine*. Ed. Romeo AA and Ahmad CS. Wolters Kluwer Health: NY, NY.

18. Erickson BJ, Chalmers PN. Anatomy and Physical Exam of the Elbow. A Chapter for *Baseball Sports Medicine*. Ed. Romeo AA and Ahmad CS. Wolters Kluwer Health: NY, NY.
19. Chalmers PN, Chamberlain AM. Biomechanics of the elbow. A Chapter for *The Unstable Elbow: An Evidence-Based Approach to Evaluation and Management* Ed. Tashjian RZ. Springer: NY, NY.
20. Chalmers PN, Keener JD. Stemmed Humeral Replacement. Anatomy Shoulder Arthroplasty – Strategies for Clinical Management. Ed. Armstrong A, Murthi A. Springer: NY, NY.
21. Chalmers PN, Cvetanovich GL, Romeo AA. Biceps Tenodesis: Distal (Subpectoral) Techniques. Disorders of Rotator Cuff and Biceps Tendon. Ed. Provencer MT, Romeo AA, Cole BJ, Boileau P. Elsevier: NY, NY.
22. Cvetanovich GL, Chalmers PN, Romeo AA. Reverse Shoulder Arthroplasty for Cuff Deficiency-Rationale and Mechanics. Disorders of Rotator Cuff and Biceps Tendon. Ed. Provencer MT, Romeo AA, Cole BJ, Boileau P. Elsevier: NY, NY.
23. Mellano CR, Virk MS, Chalmers PN, Romeo AA. Scapulothoracic Fusion. In *Advanced Reconstruction: Shoulder, 2nd edition*. AAOS: Rosemont, IL.
24. Virk MS, Chalmers P, Mellano C, Romeo AA. Open Biceps Subpectoral Tenodesis: Operative Tips to Safely Restore Function and Cosmesis. In *Advanced Reconstruction: Shoulder, 2nd edition*. AAOS: Rosemont, IL.
25. Chalmers PN, Mellano CM, Romeo AA. Arthroscopic SLAP Repair. In *AANA's The Shoulder*. Ed Ryu, Angelo, and Abrams. Elsevier: NY, NY.
26. Chalmers PN, Aleem AW, Galatz LM. Total Shoulder Arthroplasty. In *Case Competencies in Orthopaedic Surgery*. Ed. Frank R, Forsythe B, Provencher M.
27. Sershon R, Chalmers PN, Cole BJ. Chapter 24: Meniscal deficiency- Repair and Transplantation. In *Biologic Knee Reconstruction: A Surgeon's Guide*. Ed. Cole BJ and Harris JD.
28. Chalmers PN, Frank RM, Gupta AK, Yanke AB, Trenhaile SW, Romeo AA, Verma NN: All Arthroscopic Patch Augmentation of a Massive Rotator Cuff Tear. In: Chapter 7: Massive Irreparable Rotator Cuff Tears: How to Rebalance the Cuff-Deficient Shoulder. *Instructional Course Lectures, Volume 63*. Boileau P. AAOS: Chicago, IL.
29. Chalmers PN. "Femoral neck fracture", "Intertrochanteric fracture", "Cemented Primary Total Hip Arthroplasty", "Cementless Primary Total Hip Arthroplasty", and "Instability After Total Hip Arthroplasty" in *Orthopaedic Review: Clinical Vignettes*. Ed. Levine BR. Elsevier: NY, NY.
30. Chalmers PN, Nho SJ. "Anterior Glenohumeral Instability." in *Orthopaedic Review: Clinical Vignettes*. Ed. Levine BR. Elsevier: NY, NY.
31. Chalmers PN, Van Thiel GS. "Distal Biceps Repair." in *Surgical Techniques of the Shoulder, Elbow, and Knee in Sports Medicine*. Ed. Cole BJ, Sekiya JK. Elsevier: NY, NY.
32. Chalmers PN, Chahal J, Bach BR Jr. "Knee Diagnosis and Decision Making", in *DeLee and Drez's Orthopaedic Sports Medicine, 4th Ed*.
33. Chalmers PN, Sherman SL. "Patient Position, Portal Placement, Normal Arthroscopic Anatomy, and Diagnostic Arthroscopy." In *Surgical Techniques of the Shoulder, Elbow, and Knee in Sports Medicine*. Ed. Cole BJ, Sekiya JK. Elsevier: NY, NY.
34. Gregory JM, Ellman M, Chalmers PN, Ghodadra N, Romeo AA. "Anterior Shoulder Instability – Arthroscopic Repairs" in *Disorders of the Shoulder: Diagnosis and*

- Management, 3rd ed. Edited by Iannotti J, Miniaci A, Williams G, Zuckerman J. Philadelphia: Lippincott Williams & Wilkins.
35. Chalmers PN, Al-Shihabi L, Gregory JM, Ghodadra NS, Nicholson GP. "Evaluation and Classification of Failed Instability Repair." in Disorders of the Shoulder: Diagnosis and Management, 3rd ed. Edited by Iannotti J, Miniaci A, Williams G, Zuckerman J. Philadelphia: Lippincott Williams & Wilkins.
 36. Chalmers PN, Sherman SL, Ghodadra NS, Nicholson GP. "Arthroscopic management of the frozen shoulder." in AAOS Atlas of Essential Orthopaedic Procedures.
 37. Romeo AA, Chalmers PN, Sherman SL, Ghodadra NS, Mather C III. "Biceps tenotomy and tenodesis." in AAOS Atlas of Essential Orthopaedic Procedures.
 38. Chalmers PN, Green DW "Care of the equestrian athlete" in Care of the Young Athlete, 2nd Edition Ed. Harris SS, Anderson SJ. American Academy of Pediatrics, Elk Grove Village, IL; 2009.

Editorial Activities

Consultant Reviewer, <i>The Lancet</i>	March 2022-present
Consultant Reviewer, <i>Journal of Bone and Joint Surgery</i>	October 2020-present
Associate Editor, <i>Journal of Shoulder and Elbow Surgery</i>	Sept. 2019-present
Editorial Board, Technology and Basic Science, <i>Orthopedics Today</i>	Jan. 2017-present
Consultant Reviewer, <i>Journal of Orthopaedic Research</i>	Dec. 2017-present
Consultant Reviewer, <i>Journal of Bone and Joint Surgery British</i>	August 2017-present
Consultant Reviewer, <i>Journal of the AAOS</i>	June 2016-Jan. 2022
Principal Reviewer, <i>American Journal of Sports Medicine</i>	July 2015-present
Consultant Reviewer, <i>Clinical Orthopaedics and Related Research</i>	Dec. 2013-present
Consultant Reviewer, <i>Journal of Shoulder and Elbow Surgery</i>	June 2014-present
Consultant Reviewer, <i>PLOS ONE</i>	Jan. 2015
Editorial Board, <i>Rush Orthopaedic Journal</i>	July 2014-June 2015
Consultant Author and Reviewer, <i>McGraw-Hill Clinical Access</i>	July 2014-July 2016
Section Editor, "Rush Grand Rounds", <i>Orthopedics Today</i>	May 2014-June 2015
Elite Consultant Reviewer, <i>Journal of Arthroplasty</i>	Mar. 2013-Sept. 2016
Editorial Board, <i>Journal of Arthroplasty</i>	Mar. 2015-Sept. 2016
Consultant Reviewer, <i>Elsevier Clinics</i>	Apr. 2013
Consultant Reviewer, <i>SLACK Inc.</i>	Jan. 2013
Consultant Reviewer, <i>Orthopedics</i>	Jul. 2013- Jul. 2018
Consultant Reviewer, <i>McGraw-Hill Case Files</i>	Aug. 2013
Consultant Reviewer, <i>Osteoarthritis and Cartilage</i>	Nov. 2013

Presentations

Research presentations at external meetings

1. Ishikawa H, Cushman DM, Tashjian RZ, Chalmers PN. Are Sport-Related Injuries Becoming More Common in Collegiate Baseball Players? AOSSM Annual Meeting. July 15, 2023. Washington DC. Poster.

2. Erickson JB, Bowman EN, Camp C, Freehill MT, Smith MV, Serio N, Ishikawa H, Smith K, Chalmers PN. Increased Throwing Velocity is Correlated with a Higher Likelihood of Violating Current Pitch Count Recommendations in High School Baseball Pitchers. AOSSM Annual Meeting. July 15, 2023. Washington DC. Poster.
3. Bowman EN, Smith MV, Freehill MT, Camp CL, Erickson BJ, Sciascia A, Chalmers PN. What are the Indications for Medial Ulnar Collateral Ligament Surgery in Baseball Players? An MRI Case-based Study. AOSSM annual meeting, Washington DC, July 2023.
4. Tashjian RZ, Zitnay J, Kazmers NH, Henninger HB, Chalmers PN, Jurynech MJ. The Effects of Estrogen and Testosterone Supplementation after Rotator Cuff Repair In a Murine Model. ASES Specialty Day. March 10, 2023. Las Vegas, NV.
5. Chalmers PN, Tashjian RZ, Keener JD, Sefko J, Da Silva A, Catley C, Chamberlain AM. Physical Therapy Does Not Improve Outcomes After Reverse Total Shoulder Arthroplasty: A Multi-Center, Assessor-Blinded Randomized Clinical Trial. AAOS Annual Meeting. March 10, 2023. Las Vegas, NV. *Featured in AAOS Now*.
6. Tashjian RZ, Allen-Brady K, Cannon-Albright L, Chalmers PN, Jurynech M. Identification of Rare Candidate Genetic Variants Associated With Rotator Cuff Tearing. AAOS Annual Meeting. March 10, 2023. Las Vegas, NV.
7. Sulkar HJ, Alaj K, Tashjian RZ, Chalmers PN, Foreman, B, Henninger HB. Internal Rotation In Adduction After Reverse Total Shoulder Arthroplasty Demonstrates Joint Orientation And Anatomic Biases In High And Low Performing Subjects. AAOS Annual Meeting. March 10, 2023. Las Vegas, NV.
8. Chalmers PN, Mcelheny K, D'Angelo J, Rowe D, Ma K, Curriero FC, Kvit A, Erickson BJ. Effect of Weather and Game Factors on Injury Rates in Professional Baseball Players. MLB Winter Meetings. December 9, 2022. Podium.
9. Erickson BJ, Chalmers PN, D'Angelo J, Rowe DG, Cohen S, Dugas JR. Performance and Return to Sport Following Meniscal Repair in Professional Baseball Players. MLB Winter Meetings. December 9, 2022. Podium.
10. Chalmers PN, Mcelheny K, D'Angelo J, Ma K, Rowe D, Erickson BJ. Is Workload Associated With Hamstring and Calf Strains in Professional Baseball Players? An Analysis of Days of Rest, Innings Fielded, and Plate Appearances. MLB Winter Meetings. December 9, 2022. Podium.
11. Sulkar HJ, Alaj K, Tashjian RZ, Chalmers PN, Foreman, B, Henninger HB. Internal rotation in adduction after reverse total shoulder arthroplasty demonstrates joint orientation and anatomic biases in high and low performing subjects. ASES Annual Meeting, Oct 6 to 9, 2022 Atlanta, GA. Poster.
12. Chalmers PN, Tashjian RZ, Keener JD, Sefko J, Da Silva A, Catley C, Chamberlain AM. Physical Therapy Does Not Improve Outcomes After Reverse Total Shoulder Arthroplasty: A Multi-Center, Assessor-Blinded Randomized Clinical Trial. ASES Annual Meeting. October 8, 2022. Atlanta, GA.
13. Chauhan A, Erickson BJ, Chalmers PN, Romeo AA. Outcomes after Surgery for Thoracic Outlet Syndrome in Professional Baseball Players: A Matched Cohort Analysis. AOSSM Annual Meeting. July 13, 2022. Colorado Springs, CO.
14. Featherall J, Christensen GV, Mortensen AJ, Wheelwright JC, Chalmers PN, Tashjian RZ. Arthroscopic Surgery for Scapulothoracic Bursitis: A Comparison of Mid-Term Patient Reported Outcomes of Bone Resection versus Soft-Tissue-Only Debridement. Poster Presentation. AOSSM Annual Meeting. July, 16, 2022. Colorado Springs, CO.

15. Strony JT, LaBelle M, McMellen CJ, Golden ML, Chalmers P, Tashjian RZ, Gillespie RJ. Restoration of the Native Humeral Anatomy During Anatomic Total Shoulder Arthroplasty: A Radiographic Comparison of Intramedullary Versus Extramedullary Resection. Mid-America Orthopaedic Association Annual Meeting. April 6-10th, 2022. San Antonio, TX. Podium.
16. Kawakami J, Henninger HB, Knighton TW, Yamamoto N, Tashjian RZ, Itoi E, Chalmers PN. The Effect of Anterior Glenoid Cartilage Defects on Anterior Glenohumeral Instability: A Biomechanical Study. AOSSM Specialty Day. March 26, 2022. Chicago, IL. Podium.
17. Featherall J, Christensen GV, Mortensen AJ, Wheelwright JC, Chalmers PN, Tashjian RZ. Arthroscopic Surgery for Scapulothoracic Bursitis: A Comparison of Mid-Term Patient Reported Outcomes of Bone Resection versus Soft-Tissue-Only Debridement. Podium Presentation. AAOS Annual Meeting. March, 25, 2022. Chicago, IL.
18. Hurley E, Chalmers PN, et al. Ulnar Collateral Ligament Tears: A Delphi Consensus Statement. AAOS Annual Meeting. March 24, 2022. Chicago, IL. Poster.
19. Erickson BJ, Chalmers PN, D'Angelo J, Ma K, Sheridan S, Schickendantz M, Romeo AA. Timing of Return to Batting Milestones After Ulnar Collateral Ligament Reconstruction in Professional Baseball Players. ISAKOS 2021 Global Congress. November 27-28, 2021. Virtual Podium.
20. Erickson BJ, Atlee TR, Chalmers PN, Bassora R, Inzerillo C, Beharrie A, Romeo AA. Training With Lighter Baseballs Increases Velocity Without Increasing the Injury Risk. ISAKOS 2021 Global Congress. November 27-28, 2021. Poster.
21. Hadley C, Atlee T, Chalmers PN, Bassora R, Bishop ME, Anthony A. Romeo, Erickson BJ. Velocity Increases From Flat Ground to Mound Work During a Lighter Baseball Training Program. ISAKOS 2021 Global Congress. November 27-28, 2021. Poster.
22. Quinlan NJ, Smith KM, Lu CC, Chalmers PN, Tashjian RZ. Symptomatic Rotator Cuff Tear Progression. ASES Annual Meeting. October 20-23, 2021. Tampa, FL. Poster.
23. Smith KM, Wheelwright JC, Christensen GV, Ishikawa H, Tashjian RZ, Chalmers PN. COVID-19 Related Rotator Cuff Repair Delay: Did It Influence Outcomes? ASES Annual Meeting. October 20-23, 2021. Tampa, FL. Poster.
24. Zmistkowski B, Carpenter D, Chalmers PN, Smith M, Keener J. Symptomatic Aseptic Loosening of a Short Humeral Stem Following Anatomic Total Shoulder Arthroplasty. ASES Annual Meeting. October 20-23, 2021. Tampa, FL. Podium.
25. Tashjian RZ, Smith KM, Presson AP, Cannon-Albright LA, Chalmers PN. Sex hormone deficiency associates with rotator cuff tearing and revision after rotator cuff repair. Association of Bone and Joint Surgeons. Sept 30, 2021. Chicago, IL. Podium.
26. Erickson BJ, Chalmers PN, D'Angelo J, Ma K, Rowe D, Ciccotti M, Romeo AA. Update On Performance And Return To Sport After Biceps Tenodesis In Professional Baseball Players. AANA/AOSSM Specialty Day. Sept 5, 2021. San Diego, CA. Podium.
27. Erickson BJ, McElheny K, Chalmers PN, Carr JB, D'Angelo J, Rowe D, Poulis G, Lourie GM, Carlson M. Performance and Return to Sport After Excision of the Fractured Hook of the Hamate in Professional Baseball Players. AAOS Annual Meeting. Aug 31-Sept 4, 2021. San Diego, CA. Poster.
28. O'Neill DC, Christensen GV, Hillyard B, Kawakami J, Tashjian RZ, Chalmers PN. Glenoid Retroversion Associates with Deltoid Muscle Asymmetry in Walch B-type Glenohumeral Osteoarthritis. AAOS Annual Meeting. Aug 31-Sept 4, 2021. San Diego, CA. Poster.

29. Erickson BJ, Chalmers PN, Denard P, Lederman E, Horneff G, Werner BC, Provencher MT, Romeo AA. Does Commercially Available Shoulder Arthroplasty Preoperative Planning Software Agree With Surgeon Measurements Of Version, Inclination and Subluxation? Podium. AAOS Annual Meeting. Aug 31-Sept 4, 2021. San Diego, CA. Podium.
30. Smith, K.M., Chong, Z., Presson, A.P., Horns, J.J., Teerlink, C.C., Cannon-Albright, L.A., Hotaling, J., Tashjian, R.Z., Chalmers, P.N. Sex Hormone Deficiency Associates with Rotator Cuff Tearing and Revision after Rotator Cuff Repair. Western Orthopaedic Association 2021 Annual Meeting, Virtual, August 4-7, 2021. Poster
31. Erickson BJ, Chalmers PN, D'Angelo J, Ma K, Alexander F, Ahmad CS. Pre-Draft Elbow Magnetic Resonance Imaging in Major League Baseball Pitchers. Poster. AOSSM Annual Meeting. July 7-11, 2021. Nashville, TN. Poster.
32. Chalmers PN, Mcelheny K, D'Angelo J, Ma K, Rowe D, Erickson BJ. Is Workload Associated with Ulnar Collateral Ligament Tears in Professional Baseball Players? An Analysis of Days of Rest, Innings Pitched and Batters Faced. Poster. AOSSM Annual Meeting. July 7-11, 2021. Nashville, TN. Poster.
33. Erickson BJ, Chalmers PN, D'Angelo J, Ma K, Rowe D, Ciccotti MG, Romeo AA. Update On Performance And Return To Sport After Biceps Tenodesis In Professional Baseball Players. Poster. AOSSM Annual Meeting. July 7-11, 2021. Nashville, TN. Poster.
34. Chalmers PN, Mcelheny K, D'Angelo J, Ma K, Rowe D, Erickson BJ. Is Workload Associated with Internal Impingement in Professional Baseball Players? An Analysis of Days of Rest, Innings Pitched and Batters Faced. Poster. AOSSM Annual Meeting. July 7-11, 2021. Nashville, TN. Poster.
35. Chalmers PN, Mcelheny K, D'Angelo J, Ma K, Rowe D, Erickson BJ. Is Workload Associated with Internal Impingement in Professional Baseball Players? An Analysis of Days of Rest, Innings Pitched and Batters Faced. Poster. AMSSM Annual Meeting. April 13-18, 2021. Virtual Meeting.
36. Chalmers PN, Mcelheny K, D'Angelo J, Ma K, Rowe D, Erickson BJ. Is Workload Associated with Latissimus Dorsi and Teres Major Tears in Professional Baseball Players? An Analysis of Days of Rest, Innings Pitched and Batters Faced. Poster. AMSSM Annual Meeting. April 13-18, 2021. Virtual Meeting.
37. Chalmers PN, Mcelheny K, D'Angelo J, Ma K, Rowe D, Erickson BJ. Is Workload Associated with Hamstring Tears in Professional Baseball Players? An Analysis of Days of Rest, Innings Pitched and Batters Faced. Poster. AMSSM Annual Meeting. April 13-18, 2021. Virtual Meeting.
38. Chalmers PN, Mcelheny K, D'Angelo J, Ma K, Rowe D, Erickson BJ. How Does The All Star Break Affect Injury Rates In Professional Baseball? Poster. AMSSM Annual Meeting. April 13-18, 2021. Virtual Meeting.
39. Chalmers PN, Mcelheny K, D'Angelo J, Ma K, Rowe D, Erickson BJ. Is Workload Associated with Ulnar Collateral Ligament Tears in Professional Baseball Players? An Analysis of Days of Rest, Innings Pitched and Batters Faced. Rising with Research Podium Presentation. AMSSM Annual Meeting. April 13-18, 2021. Virtual Meeting.
40. Chalmers PN, English J, Cushman D, Yoon SH, Schulz BM, Li B. The Ulnar Collateral Ligament Responds to Stress in Professional Pitchers. Major League Baseball Winter Meetings. January 30, 2021. Podium. *Virtual secondary to COVID-19.*

41. Boileau P, Micoci G, Chalmers PN. Ténodèse trop tendue du biceps : une cause de douleurs persistantes postopératoires. SOFCOT Annual Meeting. November 9-11, 2020. Paris, France. Podium.
42. Nahhas CR, Chalmers PN, Parvizi J, Deirmengian GK, Chen AF, Culvern C, Moric M, Sporer SM, Della Valle CJ. Randomized Trial of Static and Articulating Spacers for Treatment of Infected Total Hip Arthroplasty. AAHKS Annual Meeting. November 5-8, 2020. Dallas, TX. Poster
43. Erickson BJ, Chalmers PN, Ma K, D'Angelo J, Romeo AA. Timing of Return to Batting Milestones Following Ulnar Collateral Ligament Reconstruction in Professional Baseball Players. AOSSM Annual Meeting. July 11, 2020. Seattle, WA. Podium. *Virtual secondary to COVID-19.*
44. Erickson BJ, Atlee TR, Chalmers PN, Bassora R, Inzerillo C, Beharrie A, Romeo AA. Training With Lighter Baseballs Increases Velocity Without Increasing Injury Risk. AOSSM Annual Meeting. July 11, 2020. Seattle, WA. Podium. *Virtual secondary to COVID-19.*
45. Chalmers PN, English J, Cushman D, Yoon SH, Schulz BM, Li B. The Ulnar Collateral Ligament Responds to Stress in Professional Pitchers. AOSSM Annual Meeting. July 11, 2020. Seattle, WA. Podium. *Virtual secondary to COVID-19.*
46. Nahhas C, Chalmers PN, Sporer SM, Berend K, Chen A, Austin M, Deirmengian G, Morris M, Parvizi J. A Randomized Clinical Trial of Articulating and Static Spacers in the Management of Chronic Periprosthetic Knee Infection. March 27, 2020. Orlando, FL. Podium. *Canceled secondary to COVID-19.*
47. Chalmers PN, Miller M, Beck L, Dowdle S, Tashjian RZ. Is Glenohumeral Osteoarthritis Associated with Acromial Morphology? AAOS Annual Meeting. March 28, 2020. Orlando, FL. Podium. *Canceled secondary to COVID-19.*
48. Tashjian RZ, Brochinsky K, Stertz I, Chalmers PN. Structural Glenoid Allograft Reconstruction During Reverse Total Shoulder Arthroplasty. AAOS Annual Meeting. March 28, 2020. Orlando, FL. Poster. *Canceled secondary to COVID-19.*
49. Tashjian RZ, Teerlink C, Chalmers PN, Childress V. Gene Expression in Torn Rotator Cuff Tendons Utilizing RNA Sequencing. AAOS Annual Meeting. March 28, 2020. Orlando, FL. Poster. *Canceled secondary to COVID-19.*
50. Tashjian RZ, Shin J, Broschinsky K, Yeh C, Martin B, Chalmers PN, Greis PE, Burks RT, Zhang Y. Minimal clinically important differences in the ASES, Simple Shoulder Test and VAS pain scores after arthroscopic rotator cuff repair. AAOS Annual Meeting. March 28, 2020. Orlando, FL. Poster. *Canceled secondary to COVID-19.*
51. Chalmers PN, Christensen G, O'Neill D, Tashjian RZ. Does Bone Loss Measurement Methodology in Glenohumeral Instability Alter Treatment? AAOS Annual Meeting. March 28, 2020. Orlando, FL. Podium. *Canceled secondary to COVID-19.*
52. Tashjian RZ, Hillyard B, Chalmers PN. Does Distalization and Lateralization with Reverse Total Shoulder Arthroplasty Associate with Change in Outcomes? AAOS Annual Meeting. March 28, 2020. Orlando, FL. Poster. *Canceled secondary to COVID-19.*
53. Chalmers PN, Beck L, Stertz I, Tashjian RZ. Hydrogen Peroxide Skin Preparation Reduces *Cutibacterium Acnes* in Shoulder Arthroplasty: A Prospective, Blinded, Controlled Trial. AAOS Annual Meeting. March 28, 2020. Orlando, FL. Poster. *Canceled secondary to COVID-19.*

54. Chalmers PN, English J, Cushman D, Yoon SH, Schulz BM, Li B. The Ulnar Collateral Ligament Responds to Stress in Professional Pitchers. AAOS Annual Meeting. March 28, 2020. Orlando, FL. Poster. *Canceled secondary to COVID-19.*
55. Chalmers PN, English J, Cushman D, Yoon SH, Schulz BM, Li B. The Ulnar Collateral Ligament Responds to Stress in Professional Pitchers. AOSSM/AANA Specialty Day. March 28, 2020. Orlando, FL. Podium. *Canceled secondary to COVID-19.*
56. Chalmers PN, English J, Cushman D, Yoon SH, Schulz BM, Li B. The Ulnar Collateral Ligament Responds to Stress in Professional Pitchers. 4th Annual Sports Medicine Injury Prevention Symposium. February 17, 2020. Park City, UT. Podium.
57. Chalmers PN, Hillyard B, Kawakami J, Christensen G, O'Neill D, Childress V, Tashjian RZ. Double-Loaded Suture Anchors in the Treatment of Anteroinferior Glenohumeral Instability. 4th Annual Sports Medicine Injury Prevention Symposium. February 17, 2020. Park City, UT. Podium.
58. Erickson BJ, Chalmers PN, D'Angelo J, Ma K, Dines JS, Romeo AA. Do Outcomes or Subsequent Injuries Differ Following Ulnar Collateral Ligament Reconstruction Using Palmaris vs. Hamstring Autograft? Major League Baseball Winter Meetings. December 6, 2019. San Diego, CA. Podium.
59. Erickson BJ, Chalmers PN, D'Angelo J, Ma K, Ahmad CS, Romeo AA. Performance and Return to Sport After Open Reduction and Internal Fixation of the Olecranon in Professional Baseball Players. Major League Baseball Winter Meetings. December 6, 2019. San Diego, CA. Podium.
60. Nahhas C, Chalmers PN, Chen AF, Deirmengian GK, Parvizi J, Austin MS, Morris MJ, Sporer SM, Berend KR, Della Valle C. A Randomized Clinical Trial of Articulating and Static Spacers in the Management of Chronic Periprosthetic Knee Infection. AAHKS Annual Meeting. November 7-10, 2019. Dallas, TX. Podium.
61. Erickson BJ, Chalmers PN, D'Angelo J, Ma K, Ahmad CS, Romeo AA. Performance and Return to Sport After Open Reduction and Internal Fixation of the Olecranon in Professional Baseball Players. ASES Annual Meeting. October 16-19, 2019. New York, NY. Poster.
62. Erickson BJ, Chalmers PN, D'Angelo J, Ma K, Romeo AA. Open Reduction Internal Fixation of medial epicondyle fractures after UCLR in professional baseball pitchers. ASES Annual Meeting. October 16-19, 2019. New York, NY. Podium.
63. Chalmers PN, Beck L, Stertz I, Tashjian RZ. Hydrogen Peroxide Skin Preparation Reduces *Cutibacterium Acnes* in Shoulder Arthroplasty: A Prospective, Blinded, Controlled Trial. ASES Annual Meeting. New York City, NY. October 17, 2019. Poster.
64. Jacxsens M, Elhabian SY, Chalmers Pn, Tashjian RZ, Henninger HB. Thinking Outside the Glenohumeral Box: Hierarchical Shape Variation of the Periarticular Anatomy of the Scapula Using Statistical Shape Modeling. ICSES Annual Meeting. September 18, 2019. Buenos Aires, Brazil. Podium.
65. Nahhas C, Chalmers PN, Sporer SM, Berend KR, Morris MJ, Deirmengian G, Parvizi J, Austin M, Della Valle CJ. Articulating vs. Static Spacers in the Management of Periprosthetic Knee Infection: A Randomized Clinical Trial. The Knee Society Annual Meeting. Sept 6, 2019. Cape Neddick, ME. Podium.
66. Erickson BJ, Chalmers PN, Potter H, Altchek DW, Romeo AA. Magnetic Resonance Imaging Grading System For Tears Of The Latissimus Dorsi And Teres Major. Closed SECEC-ESSE Annual Meeting. Aug 31-Sept 1, 2019. Copenhagen, Denmark. Poster.

67. Chalmers PN, Erickson BJ, Ma K, D'Angelo J, Romeo AA. Epidemiology of Shoulder Surgery in Professional Baseball Players. AOSSM Annual Meeting, July 11-14, 2019. Boston, MA. Podium
68. Chalmers PN, English J, Cushman D, Yoon SH, Schulz BM, Li B. The Ulnar Collateral Ligament Responds to Stress in Professional Pitchers. AOSSM Annual Meeting, July 11-14, 2019. Boston, MA. Poster.
69. Chauhan A, Chalmers PN, McQueen PD, Camp CL, Potter HG, Ciccotti MG, D'Angelo J, Hoenecke HR, Erickson BJ, Fealy S, Fronck J. Non-Operative Treatment of Elbow Ulnar Collateral Ligament Injuries with and without Platelet-Rich Plasma in Professional Baseball Players: A Comparative and Matched Cohort Analysis. AOSSM Annual Meeting, July 11-14, 2019. Boston, MA. Podium
70. Erickson BJ, Chalmers PN, D'Angelo J, Ma K, Romeo AA. Open Reduction Internal Fixation Of Medial Epicondyle Fractures After Ulnar Collateral Ligament Reconstruction In Professional Baseball Pitchers. AOSSM Annual Meeting. July 11-14, 2019. Boston, MA. Poster
71. Erickson BJ, Chalmers PN, D'Angelo J, Ma K, Romeo AA. Performance And Return To Sport Following Open Reduction Internal Fixation About The Elbow In Professional Baseball Players. Poster. AOSSM Annual Meeting. July 11-14, 2019. Boston, MA. Poster
72. Erickson BJ, Chalmers PN, D'Angelo J, Ma K, Ahmad CS, Dines JS, Romeo AA. Hamstring Graft Harvest Side Does Not Affect Performance or RTS Rates and Does Not Increase Risk for Future Hamstring Injuries Following UCL Reconstruction in Professional Baseball Players. Poster. AOSSM Annual Meeting. July 11-14, 2019. Boston, MA. Poster
73. Erickson BJ, Chalmers PN, D'Angelo J, Ma K, Romeo AA. Performance and return to sports following ulnar nerve decompression/transposition in professional baseball players. ACSM Annual Meeting. May 29, 2019. Orlando, FL.
74. Erickson BJ, Chalmers PN, D'Angelo J, Ma K, Dines JS, Romeo AA. Do Outcomes or Subsequent Injuries Differ Following Ulnar Collateral Ligament Reconstruction Using Palmaris vs. Hamstring Autograft? ACSM Annual Meeting. May 29, 2019. Orlando, FL.
75. Erickson BJ, Chalmers PN, D'Angelo J, Ma K, Dines JS, Romeo AA. Open Reduction Internal Fixation of Medial Epicondyle Fractures After Ulnar Collateral Ligament Reconstruction in Professional Baseball Pitchers. ACSM Annual Meeting. May 29, 2019. Orlando, FL.
76. Erickson BJ, Chalmers PN, D'Angelo J, Ma K, Dines JS, Ahmad CS, Romeo AA. Land leg vs. Drive Leg Hamstring Graft Harvest Side Does Not Affect Performance or RTS Rates and Does Not Increase Risk for Future Hamstring Injuries Following UCLR in Professional Baseball Pitchers. ACSM Annual Meeting. May 29, 2019. Orlando, FL.
77. Erickson BJ, Chalmers PN, D'Angelo J, Ma K, Dines JS, Romeo AA. Performance and Return to Sport Following Latissimus Dorsi and Teres Major Tears in Professional. ACSM Annual Meeting. May 29, 2019. Orlando, FL.
78. Ross B, Chalmers PN, Willick S. Finishing the Pitch: An Uncommon Case of Posterior Elbow Pain in a High School Pitcher. AMSSM Annual Meeting. April 12, 2019. Houston, TX.
79. Chauhan A, Chalmers P, McQueen P, Camp C, Potter H, Ciccotti M, D'Angelo J, Fealy S, Fronck J. Nonoperative Treatment of Elbow Ulnar Collateral Ligament Injuries in

- Professional Baseball Players: Understanding Outcomes by MRI Grade and Location of Tear. AAOS Annual Meeting, March 14, 2019. Las Vegas, NV. Poster.
80. Kolz CW, Sulkar HJ, Aliaj K, Tashjian RZ, Chalmers PN, Henninger H. Changes in Scapulothoracic and Glenohumeral Joint Angles During Humeral Internal Rotation in Adduction. ORS Annual Meeting, March 14, 2019. Las Vegas, NV. Poster.
 81. Tashjian RZ, Martin B, Ricketts C, Henninger HB, Granger E, Chalmers PN. Superior Baseplate Inclination Is Associated With Instability After Reverse Total Shoulder Arthroplasty. AAOS Annual Meeting, March 14, 2019. Las Vegas, NV. Poster.
 82. Chalmers PN, English J, Schultz B, Yoon S, Li B. The Ulnar Collateral Ligament Responds to Stress in Professional Pitchers. AAOS Annual Meeting, March 14, 2019. Las Vegas, NV. Podium.
 83. Chalmers PN, Kahn T, Broschinsky K, Ross H, Stertz I, Nelson R, Yoo M, Tashjian RZ. An Analysis of Costs Associated with Shoulder Arthroplasty. AAOS Annual Meeting, March 14, 2019. Las Vegas, NV. Podium.
 84. Chalmers PN, Erickson BJ, D'Angelo J, Romeo AA. Shoulder Surgery in Professional Baseball Players. AAOS Annual Meeting, March 14, 2019. Las Vegas, NV. Podium.
 85. Chauhan A, Chalmers PN, Ciccotti MG, Fronck J. Non-Operative Treatment of Elbow Ulnar Collateral Ligament Injuries with and without Platelet-Rich Plasma in Professional Baseball Players: A Comparative and Matched Cohort Analysis. MLB Winter Meetings, Las Vegas. December 7, 2018. Podium.
 86. Erickson BJ, Chalmers PN, D'Angelo J, Ma K, Romeo AA. Performance and Return to Sport Following Latissimus Dorsi and Teres Major Tears in Professional Baseball Pitchers. MLB Winter Meetings, Las Vegas. December 7, 2018. Podium.
 87. Erickson BJ, Chalmers PN, D'Angelo J, Ma K, Romeo AA. Performance and Return to Sport Following Ulnar Nerve Decompression/Transposition in Professional Baseball Players. MLB Winter Meetings, Las Vegas. December 7, 2018. Podium.
 88. Erickson BJ, Chalmers PN, D'Angelo J, Ma K, Romeo AA. Performance and Return to Sport Following Rotator Cuff Surgery in Professional Baseball Players. MLB Winter Meetings, Las Vegas. December 7, 2018. Podium.
 89. Chalmers PN, Erickson BJ, Ma K, D'Angelo J, Romeo AA. Epidemiology of Shoulder Surgery in Professional Baseball Players. MLB Winter Meetings, Las Vegas. December 7, 2018. Podium.
 90. Chalmers PN, Erickson BJ, Verma NN, D'Angelo J, Romeo AA. Incidence and Return to Play of Biceps Tenodesis in Major League Baseball Players. MLB Winter Meetings, Las Vegas. December 7, 2018. Podium.
 91. Boileau P, Morin-Salvo N, Gauci MO, Seeto BL, Chalmers PN, Holzer N, Walch G. Angled BIO-RSA (bony-Increased reverse shoulder arthroplasty-offset): a solution for management of glenoid bone loss and erosion. SECEC Annual Meeting, Geneva, Switzerland. September 20, 2018. Podium.
 92. Orvets N, Gosselin M, Patterson B, Chalmers PN, Salazar D, Keener JD, Chamberlain AM. Midterm Functional And Radiographic Outcomes Of Total Shoulder Arthroplasty In Patients With A B2 Glenoid Addressed With Corrective Reaming. SECEC-ESSSE Congress, Geneva Switzerland, September 19-22, 2018. Podium.
 93. Orvets N, Patterson B, Chalmers PN, Gosselin M, Salazar D, Keener JD, Chamberlain AM. Total Shoulder Arthroplasty with an Anterior Offset Humeral Head in Patients with a B2 Glenoid. SECEC-ESSSE Congress, Geneva Switzerland, September 19-22, 2018. Poster.

94. Jacxsens M, Peter N. Chalmers PN, Robert Z. Tashjian RZ, Heath B. Henninger HB. Glenoid Defect Size Depends On Glenoid Defect Orientation In Patients With Recurrent Traumatic Anterior Shoulder Instability. SECEC-ESSSE Congress, Geneva Switzerland, September 19-22, 2018. Poster.
95. Erickson BJ, Chalmers PN, D'Angelo J, Ma K, Romeo AA. Open Reduction Internal Fixation Of Medial Epicondyle Fractures After Ulnar Collateral Ligament Reconstruction In Professional Baseball Pitchers. SECEC-ESSSE Congress, Geneva Switzerland, September 19-22, 2018. Poster.
96. Erickson BJ, Chalmers PN, D'Angelo J, Ma K, Romeo AA. Performance And Return To Sport Following Ulnar Nerve Decompression/Transposition In Professional Baseball Players. SECEC-ESSSE Congress, Geneva Switzerland, September 19-22, 2018. Poster.
97. Erickson BJ, Chalmers PN, Potter H, Altchek DW, Romeo AA. Magnetic Resonance Imaging Grading System For Tears Of The Latissimus Dorsi And Teres Major. SECEC-ESSSE Congress, Geneva Switzerland, September 19-22, 2018. Poster.
98. Erickson BJ, Chalmers PN, D'Angelo J, Ma K, Romeo AA. Performance And Return To Sport Following Latissimus Dorsi And Teres Major Tears In Professional Baseball Pitchers. SECEC-ESSSE Congress, Geneva Switzerland, September 19-22, 2018. Poster.
99. Erickson BJ, Chalmers PN, D'Angelo J, Ma K, Romeo AA. Performance And Return To Sport Following Open Reduction Internal Fixation About The Elbow In Professional Baseball Players. SECEC-ESSSE Congress, Geneva Switzerland, September 19-22, 2018. Poster.
100. Jacxsens M, Elhabian S, Chalmers P, Tashjian R, Henninger H. Periarticular and Glenoid Morphology of the Scapular Differs in Patients with Hill-Sachs Lesions: a Controlled Statistical Shape Modeling Study. 78th Annual Conference of the Swiss Society of Orthopedics and Trauma Surgery, 6-8th June 2018, Montreux, Switzerland
101. Erickson BJ, Chalmers PN, D'Angelo J, Ma K, Romeo AA. Performance and Return to Sport Following Ulnar Nerve Transposition/Decompression in Professional Baseball Players. 2018 AOSSM Annual Meeting. San Diego, CA. July 5-8, 2018. Poster.
102. Erickson BJ, Chalmers PN, D'Angelo J, Ma K, Romeo AA. Performance and Return to Sport Following Latissimus Dorsi and Teres Major Injuries in Professional Baseball Pitchers. 2018 AOSSM Annual Meeting. San Diego, CA. July 5-8, 2018. Poster.
103. Jacxsens M, Elhabian SY, Chalmers PN, Tashjian RZ, Heninnger HB. Periarticular and Glenoid Morphology of the Scapula Differs in Patients with Hill-Sachs Lesions: a Controlled Statistical Shape Modeling Study. 2018 ORS Annual Meeting. New Orleans, LA. March 6-10, 2018. Poster.
104. Rao AJ, Chalmers PN, Cvetanovich GL, O'Brien M, Newgren J, Cole BJ, Verma NN, Nicholson GP, Romeo AA. Does Pre-operative Doxycycline Reduce *Propionibacterium Acnes* in Shoulder Arthroplasty? 2018 Mid-America Orthopaedic Association Annual Meeting. San Antonio, TX. April 18-22, 2018. Podium.
105. Rao AJ, Chalmers PN, Cvetanovich GL, O'Brien M, Newgren J, Cole BJ, Verma NN, Nicholson GP, Romeo AA. Does Pre-operative Doxycycline Reduce *Propionibacterium Acnes* in Shoulder Arthroplasty? 2018 AAOS Annual Meeting. New Orleans, LA. March 6-10, 2018. Poster.
106. Orvets N, Patterson B, Gosselin M, Chalmers P, Salazar D, Keener J, Chamberlain A. Midterm Functional Outcomes of Total Shoulder Arthroplasty in Patients with a B2 Glenoid Addressed with a Reversed Offset Humeral Head. 2018 AAOS Annual Meeting. New Orleans, LA. March 6-10, 2018. Podium

107. Chamberlain AM, Salazar DH, Yamaguchi K, Keener JD, Chalmers PN. Cost Predictors in Shoulder Arthroplasty: An Comprehensive Analysis of a Single High-Volume Center. 2018 AAOS Annual Meeting. New Orleans, LA. March 6-10, 2018. Podium
108. Tashjian RZ, Granger E, Chalmers PN. Structural Glenoid Grafting During Primary Reverse Total Shoulder Arthroplasty Utilizing Humeral Head Autograft. 2018 AAOS Annual Meeting. New Orleans, LA. March 6-10, 2018. Podium
109. Rao AJ, Chalmers PN, Cvetanovich GL, O'Brien M, Newgren J, Cole BJ, Verma NN, Nicholson GP, Romeo AA. Does Pre-operative Doxycycline Reduce *Propionibacterium Acnes* in Shoulder Arthroplasty? ASES Annual Meeting. New Orleans, LA. October 13, 2018. Podium.
110. Orvets ND, Patterson B, Chalmers PN, Yamaguchi K, Keener JD, Chamberlain AM. Midterm Functional and Radiographic Outcomes of Total Shoulder Arthroplasty in Patients with a B2 Glenoid Addressed with Corrective Reaming. San Diego Shoulder Meeting. June 16, 2017.
111. Erickson BJ Chalmers PN, Waterman BR, Griffin JW, Romeo AA. Performance And Return To Sport In Elite Baseball Players Following Repair Of The Latissimus Dorsi And Teres Major. SECEC Annual meeting. Berlin, Germany. Sept 13-16, 2017. Poster.
112. Erickson BJ, Chalmers PN, Bach BR, Cohen S, Dines J, Verma NN, Romeo AA. Does Length of Time Between Surgery and Return to Sport Following Ulnar Collateral Ligament Reconstruction in Major League Baseball Players Predict Need for Revision Surgery? AOA Annual Leadership Meeting. Charlotte, NC. June 20-24, 2017.
113. Frank RM, Chalmers PN, Moric M, Provencher MT, Cole BJ, Verma NN, Romeo AA. Incidence and Trends of Shoulder Stabilization in the United States. 2016 French Arthroscopy Society Annual Meeting. Paris, France. Nov 30-Dec 3, 2016. Podium.
114. Erickson BJ, Cvetanovich GL, Frank RM, Chalmers PN, Bell JA, Bach Jr. BR, Cole BJ, Verma NN, Romeo AA. Comprehensive Management of Subscapularis Tendon Tears in 2017: An Algorithmic Approach. AAOS Annual Meeting. March 14-18, 2017, San Diego, CA. Scientific Exhibit.
115. Erickson BJ, Chalmers PN, Romeo AA, Cohen MS. Double Docking Technique for Ulnar Collateral Ligament Reconstruction. AAOS Annual Meeting. March 14-18, 2017, San Diego, CA. Video.
116. Erickson BJ, Chalmers PN, Axe MJ, Romeo AA. Effect of exceeding pitch limit recommendations and specialization as a pitcher on risk for UCLR in former LLWS Pitchers who played professional baseball. AAOS Annual Meeting. San Diego, CA. March 14-18, 2017. Poster
117. Chalmers PN, Erickson BJ, Verma NN, Romeo AA. Incidence and Return to Play after Biceps Tenodesis in Major League Baseball Players. AAOS/AOSSM Specialty Day. San Diego, CA. March 18, 2017. Podium. *Featured in Orthopaedics Today.*
118. Keener JD, Chalmers PN, Salazar DH, Chamberlain AM. Radiographic Characterization of the B2 Glenoid: The Effect of Computed Tomographic Axis Orientation. 2017 ASES Annual Meeting. New Orleans, LA. October 11-14, 2017. Podium.
119. Cvetanovich GL, Chalmers PN, Mather RC III, Harris JD, Bush-Joseph CA, Nho SJ. Hip arthroscopy in the United States: surgical volume trends, 30-day post-operative morbidity and mortality. AANA Annual Meeting, Boston, MA, April 14-16, 2016. ePoster.
120. Chalmers PN, Cvetanovich GL, Kupfer N, Wimmer MA, Verma NN, Cole BJ, Romeo AA, Nicholson GP. The Champagne Toast Position Isolates the Supraspinatus: An

- Electromyographic Study of Shoulder Physical Examination Tests. SECEC Annual meeting. Jeju, Korea. May 18-20, 2016. Podium.
121. Erickson BJ, Sgori T, Chalmers PN, Vignona P, Lesniak M, Bush-Joseph CA, Verma NN, Romeo AA. Does Fatigue Alter Pitching Mechanics? International Congress of Shoulder and Elbow Surgery. SECEC Annual Meeting. Jeju, Korea. May 18-20, 2016. Podium. *Awarded the Best Podium Presentation Award.*
 122. Chalmers PN, Kayupov E, Sporer SM, Berend KR, Morris MJ, Deirmengian G, Parvizi J, Austin M, Della Valle CJ. Articulating vs. Static Spacers in the Management of Periprosthetic Knee Infection: A Randomized Clinical Trial. MAOA 2016 Annual Meeting. Bonita Springs, FL. April 13-17, 2016. Podium. *Awarded the Physician in Training Award.*
 123. Kayupov E, Chalmers PN, Sporer SM, Deirmengian G, Parvizi J, Austin M, Della Valle CJ. A Multi-Center Randomized Clinical Trial of Articulating and Static Spacers for Periprosthetic Hip Infection. MAOA 2016 Annual Meeting. Bonita Springs, FL. April 13-17, 2016. Poster.
 124. Erickson BJ, Chalmers PN, Cvetanovich GL, Frank RM, Saltzman BM, Bach BR Jr, Cole BJ, Romeo AA, Verma NN. Superior Labral Anterior-Posterior Tears 2016 Update: Ignore, Debride, Repair, or Tenodesis? 2016 AAOS Annual Meeting. Orlando, FL. March 1-5, 2016. Scientific Exhibit.
 125. Kayupov E, Chalmers PN, Sporer SM, Berend KR, Deirmengian G, Parvizi J, Austin M, Della Valle CJ. A Multi-Center Randomized Clinical Trial of Articulating and Static Spacers in the Management of Periprosthetic Hip Infection. AAOS Annual Meeting, Orlando, FL, March 5, 2016. Podium.
 126. Frank RM, Plummer D, Chalmers PN, Della Valle CJ, Cole BJ. Does Prior Cartilage Restoration Impact Outcomes of Knee Arthroplasty? 2016 AAOS Annual Meeting. Orlando, FL. March 1-5, 2016. Poster.
 127. Frank RM, Yanke AB, Chalmers PN, Sayegh ET, Jain A, Verma NN, Romeo AA, Cole BJ, Bach BR Jr. Fixation of Soft Tissue to Bone: Techniques, Implants and Fundamentals. 2016 AAOS Annual Meeting. Orlando, FL. March 1-5, 2016. Scientific Exhibit.
 128. Cvetanovich GL, Bohl DD, Chalmers PN, Cole BJ, Romeo AA, Bach BR Jr. Do Patient Populations From High Quality Prospective Sports And Shoulder Studies And National Databases Differ? AAOS Annual Meeting, Orlando, FL, March 5, 2016. Poster.
 129. Chalmers PN, Kayupov E, Sporer SM, Berend KR, Deirmengian GK, Parvizi J, Austin M, Chen A, Della Valle CJ. Articulating vs. Static Spacers in the Management of Periprosthetic Knee Infection: A Randomized Clinical Trial. AAOS Annual Meeting, Orlando, FL, March 5, 2016. Podium. *Featured in AAOS Now.*
 130. Chalmers PN, Erickson BJ, Ball B, Romeo AA, Verma NN. Fastball Pitch Velocity Predicts Ulnar Collateral Ligament Reconstruction in MLB Pitchers. AAOS Annual Meeting, Orlando, FL, March 5, 2016. Podium.
 131. Chalmers PN, Levine BR. Service Versus Education in Residency Training. CORD/AOA meeting within the AAOS Annual Meeting, Orlando, FL, March 5, 2016. Podium.
 132. Erickson BJ, Sgori T, Chalmers PN, Vignona P, Lesniak M, Bush-Joseph CA, Verma NN, Romeo AA. Does Fatigue Alter Pitching Mechanics? AAOS/AOSSM Specialty Day, Orlando, FL, March 5, 2016. Podium. *Selected by the Public Relations Committee to be promoted with a press release.*

133. Chalmers PN, Kayupov E, Sporer SM, Berend KR, Deirmengian G, Parvizi J, Austin M, Chen A, Della Valle CJ. Articulating vs. Static Spacers in the Management of Periprosthetic Knee Infection: A Randomized Clinical Trial. Knee Society Open Meeting, Orlando, FL, March 5, 2016. Podium.
134. Kayupov E, Chalmers PN, Sporer SM, Berend KR, Deirmengian G, Parvizi J, Austin M, Della Valle CJ. A Multi-Center Randomized Clinical Trial of Articulating and Static Spacers in the Management of Periprosthetic Hip Infection. International Hip Society Closed Meeting, Chicago, IL. September 10-12, 2015.
135. Kayupov E, Chalmers PN, Sporer SM, Berend KR, Deirmengian G, Parvizi J, Austin M, Della Valle CJ. A Multi-Center Randomized Clinical Trial of Articulating and Static Spacers in the Management of Periprosthetic Hip Infection. Hip Society Closed Meeting, Sonoma, CA. October 15-17, 2015.
136. Cvetanovich GL, Chalmers PN, Mather RC III, Harris JD, Bush-Joseph CA, Nho SJ. Hip Arthroscopy in the United States: Surgical Volume Trends and 30 Day Post-Operative Morbidity and Mortality. International Society for Hip Arthroscopy Annual Meeting, Cambridge, England. September 24-26, 2015.
137. Chalmers PN, Kayupov E, Sporer SM, Berend KR, Deirmengian G, Parvizi J, Austin M, Chen A, Della Valle CJ. Articulating vs. Static Spacers in the Management of Periprosthetic Knee Infection: A Randomized Clinical Trial. AAHKS Annual Meeting, Dallas, TX, Nov 10-13, 2015. Podium.
138. Kayupov E, Chalmers PN, Sporer SM, Berend KR, Deirmengian G, Parvizi J, Austin M, Della Valle CJ. A Multi-Center Randomized Clinical Trial of Articulating and Static Spacers in the Management of Periprosthetic Hip Infection: Preliminary Results. AAHKS Annual Meeting, Dallas, TX, Nov 10-13, 2015. Poster.
139. Erickson BJ, Sgori T, Chalmers PN, Vignona P, Lesniak M, Bush-Joseph CA, Verma NN, Romeo AA. Does Fatigue Alter Pitching Mechanics? SECEC Annual Meeting, Milan, Italy, Sept 16-19, 2015. Poster.
140. Erickson BJ, Chalmers PN, Cvetanovich GL, Frank RM, Romeo AA, Harris JD. Quality and Quantity of the Elbow Arthroscopy Literature: A Systemic Review and Meta-analysis. SECEC Annual Meeting, Milan, Italy, Sept 16-19, 2015. Poster.
141. Chalmers PN, Sgroi TA, Riff A, Lesniak M, Sayegh E, Verma NN, Cole BJ, Romeo AA. Correlates with Injury in Youth and Adolescent Pitchers. SECEC Annual Meeting, Milan, Italy, Sept 16-19, 2015. Poster.
142. Chalmers PN, Sgroi T, Riff A, Lesniak M, Sayegh E, Wimmer MA, Verma NN, Cole BJ, Romeo AA. Predictors Of Throwing Velocity In Youth And Adolescent Pitchers. SECEC Annual Meeting, Milan, Italy, Sept 16-19, 2015. Poster.
143. Mascarenhas R, Chalmers PN, Feldheim T, Mellano CR, Forsythe B, Romeo AA, Nicholson GP. Reverse Total Shoulder Arthroplasty For The Treatment Of Osteoarthritis Without Radiographic Rotator Cuff Tear: A Case Control Study. SECEC Annual Meeting, Milan, Italy, Sept 16-19, 2015. Poster.
144. Mellano CR, Chalmers PN, Verma NN, Cole BJ, Romeo AA, Nicholson GP. Functional Results of Bilateral Reverse Total Shoulder Arthroplasty. SECEC Annual Meeting, Milan, Italy, Sept 16-19, 2015. Podium. *Nominated for the best paper award.*
145. Chalmers PN, Cvetanovich GL, Kupfer N, Wimmer MA, Verma NN, Cole BJ, Romeo AA, Nicholson GP. Jobe's Position Not The Optimal Position To Test Supraspinatus Strength. SECEC Annual Meeting, Milan, Italy, Sept 16-19, 2015. Podium.

146. Chalmers PN. The role of motion analysis in the prevention and treatment of youth pitching-related upper extremity injuries. Midwest Resident Research Symposium, Chicago, IL. April 17, 2015. Podium.
147. Mascarenhas R, Chalmers PN, Feldheim T, Mellano CR, Forsythe B, Romeo AA, Nicholson GP. Reverse Total Shoulder Arthroplasty For The Treatment Of Osteoarthritis Without Radiographic Rotator Cuff Tear: A Case Control Study. COA/CORS Annual Meeting, Vancouver, BC, Canada. June 17-20, 2015. Poster.
148. Chalmers PN, Feldheim T, Mellano CR, Mascarenhas R, Forsythe B, Romeo AA, Nicholson GP. Reverse Total Shoulder Arthroplasty For The Treatment Of Osteoarthritis Without Radiographic Rotator Cuff Tear: A Case Control Study. 10th Biennial ISAKOS Congress. Lyon, France. June 7-11, 2015. Poster.
149. Chalmers PN, Sgroi T, Riff A, Lesniak M, Sayegh E, Wimmer MA, Verma NN, Cole BJ, Romeo AA. Predictors Of Throwing Velocity In Youth And Adolescent Pitchers. 10th Biennial ISAKOS Congress. Lyon, France. June 7-11, 2015. Poster.
150. Frank RM, Plummer D, Chalmers PN, Cole BJ, Della Valle CJ. Does Prior Cartilage Restoration Negatively Impact Outcomes of Knee Arthroplasty? 10th Biennial ISAKOS Congress. Lyon, France. June 7-11, 2015. Poster.
151. Frank RM, Plummer D, Chalmers PN, Cole BJ, Della Valle CJ. Does Prior Cartilage Restoration Negatively Impact Outcomes of Knee Arthroplasty? 2015 AOA Annual Meeting. June 24-27, 2015. Providence, RI. Podium.
152. Frank RM, Plummer D, Chalmers PN, Cole BJ, Della Valle CJ. Does Prior Cartilage Restoration Negatively Impact Outcomes of Knee Arthroplasty? 2015 AANA Annual Meeting, 23-25 April 2015, Los Angeles, CA. Podium.
153. Frank RM, Plummer D, Chalmers PN, Cole BJ, Della Valle CJ. Does Prior Cartilage Restoration Negatively Impact Outcomes of Knee Arthroplasty? 2015 MAOA Annual Meeting, 22-26 April 2015, Hilton Head Island, SC. Podium.
154. Chalmers PN, Cip J, Trombley R, Monson B, Wimmer M, Cole BJ, Verma NN, Romeo AA. Post-operative Restoration Of Upper Extremity Motion and Neuromuscular Control During The Overhand Pitch: Evaluation Of Tenodesis And Repair For SLAP Tears. ASES Annual Closed Meeting. Pinehurst, NC. October 9-12, 2014. Podium.
155. Chalmers PN, Sgroi TA, Riff A, Lesniak M, Sayegh E, Verma NN, Cole BJ, Romeo AA. Predictors of throw velocity in youth and adolescent pitchers. ASSET Annual Meeting. Pinehurst, NC. October 9-12, 2014. Podium.
156. Chalmers PN, Sgroi TA, Riff A, Lesniak M, Sayegh E, Verma NN, Cole BJ, Romeo AA. Correlates with Injury in Youth and Adolescent Pitchers. ASSET Annual Meeting. Pinehurst, NC. October 9-12, 2014. Podium.
157. Frank RM, Plummer D, Chalmers PN, Cole BJ, Della Valle CJ. Does Prior Cartilage Restoration Negatively Impact Outcomes of Knee Arthroplasty? AAHKS 2014 Annual Meeting. November 6-9, 2014. Dallas, TX. Poster.
158. Frank RM, Plummer D, Chalmers PN, Sporer S, Levine BR, Cole BJ, Della Valle CJ. Does Prior Cartilage Restoration Negatively Impact Outcomes of Knee Arthroplasty? Members Meeting of the Knee Society. Oct 16-18, 2014. Charlotte, NC. Podium.
159. Riff AJ, Sershon RA, Chalmers PN, Cvetanovich GL, Verma NN, Cole BJ, Romeo AA, Bach BR Jr. Biceps Tenodesis Update: Indications, Techniques, Results, and Complications. Scientific Exhibit SE #84. AAOS Annual Meeting. Las Vegas, NV, March 24-28, 2015.

160. Chalmers PN, Monson B, Frank RM, Mellano C, Mascarenhas R, Cole BJ, Verma NN, Nicholson GP, Bach BR, Romeo AA. Combined labral repair and biceps tenodesis for superior labral anterior posterior tears: clinical comparison to tenodesis alone and repair alone. AAOS Annual Meeting, 25-27 March 2015, Las Vegas, NV. Poster.
161. Chalmers PN, Sgroi T, Riff AJ, Lesniak M, Sayegh E, Verma NN, Cole BJ, Romeo AA. Correlates with injury in youth and adolescent pitchers. AAOS Annual Meeting, 25-27 March 2015, Las Vegas, NV. Podium.
162. Chalmers PN, Sgroi T, Riff AJ, Lesniak M, Verma NN, Cole BJ, Romeo AA. Correlates with injury in youth and adolescent pitchers. AOSSM/AAOS Specialty Day, 28 March 2015, Las Vegas, NV. Podium. *Selected by the Public Relations Committee to be promoted with a press release.*
163. Chalmers PN, Monson B, Mascarenhas R, Verma NN, Cole BJ, Romeo AA. Combined labral repair and biceps tenodesis for superior labral anterior-posterior tears. SECEC Annual Meeting. 17-20 September 2014. Istanbul, Turkey. Podium.
164. Chalmers PN, Gupta AK, Klosterman E, Harris JD, Bach BR, Verma NN, Cole BJ, Romeo AA. Subpectoral Biceps Tenodesis as Primary Treatment for Superior Labrum Anterior-Posterior (SLAP) Tears. SECEC Annual Meeting. 17-20 September 2014. Istanbul, Turkey. Poster.
165. Chalmers PN, Cip J, Trombley R, Monson B, Wimmer M, Cole BJ, Verma NN, Romeo AA. Upper Extremity Motion In The Overhand Pitch: Evaluation Of Tenodesis And Repair For SLAP Tears. SECEC Annual Meeting. 17-20 September 2014. Istanbul, Turkey. Poster.
166. Chalmers PN, Yanke AB, Frank RM, Cole BJ. Clinical outcomes of allograft meniscal transplant revision. AOSSM Annual Meeting. 10-13 July 2014, Seattle, WA. Poster.
167. Chalmers PN, Cip J, Trombley R, Monson B, Wimmer M, Cole BJ, Verma NN, Romeo AA. Post-operative Restoration Of Upper Extremity Motion and Neuromuscular Control During The Overhand Pitch: Evaluation Of Tenodesis And Repair For SLAP Tears. AOSSM Annual Meeting. 10-13 July 2014, Seattle, WA. Podium.
168. Chalmers PN, Feldheim TF, Mellano CR, Mascarenhas R, Fosythe B, Romeo AA, Nicholson GP. Reverse total shoulder arthroplasty for the treatment of osteoarthritis without radiographic rotator cuff tear: a case control study. San Diego Shoulder Course. June 18-21 2014. San Diego, CA. Poster.
169. Chalmers PN, Feldheim TF, Saltzman BM, Mellano CR, Mascarenhas R, Romeo AA, Nicholson GP. Pectoralis transfer for long thoracic nerve palsy: A comparison of direct and direct reconstruction techniques. San Diego Shoulder Course. June 18-21 2014. San Diego, CA. Poster.
170. Chalmers PN, Cip J, Trombley R, Klosterman EL, Wimmer M, Cole BJ, Verma NN, Romeo AA. Upper Extremity Motion In The Overhand Pitch: Evaluation Of Tenodesis And Repair For SLAP Tears. ESSKA 16th Annual Congress, 14-17 May 2014, Amsterdam, The Netherlands. Podium.
171. Chalmers PN, Cip J, Trombley R, Klosterman EL, Wimmer M, Cole BJ, Verma NN, Romeo AA. Post-operative Restoration Of Neuromuscular Control During The Overhand Pitch: Evaluation Of Tenodesis And Repair For SLAP Tears. ESSKA 16th Annual Congress, 14-17 May 2014, Amsterdam, The Netherlands. Podium.
172. Chalmers PN, Cip J, Trombley R, Klosterman EL, Wimmer M, Cole BJ, Verma NN, Romeo AA. Glenohumeral function of the long-head of the biceps muscle: An

- electromyographic analysis. ESSKA 16th Annual Congress, 14-17 May 2014, Amsterdam, The Netherlands. Poster.
173. Erickson B, Cvetanovich GL, Chalmers PN, Farr J, Bach BR, Cole BJ, Sherman SL. Tibial Tubercle Osteotomy: Indications Techniques and Outcomes. AAOS Annual meeting, March 15, 2014, New Orleans, LA. Scientific exhibit.
 174. Frank RM, Yanke AB, Chalmers PN, Cole BJ. Clinical outcomes of allograft meniscal transplant revision. AANA Annual Meeting, May 1-3, 2014, Hollywood, Florida. Podium presentation.
 175. Gupta AK, Chalmers PN, Bach BR, Verma NN, Romeo AA. Subpectoral Biceps Tenodesis for Superior Labrum Anterior-Posterior (SLAP) Tears. AANA Annual Meeting, May 1-3, 2014, Hollywood, Florida. Poster.
 176. Chalmers PN, Frank RM, Gupta AK, Yanke AB, Trenhaile SW, Romeo AA, Verma NN. Advances in the Management of Massive Rotator Cuff Tears: All-Arthroscopic Patch Augmentation. AAOS Annual meeting, March 15, 2014, New Orleans, LA. Scientific exhibit.
 177. Frank RM, Bhatia S, Chalmers PN, Gupta AK, Romeo AA, Verma NN, Cole BJ, Provencher MT. Advances in the Comprehensive Management of Bone Defects in Recurrent Shoulder Instability. AAOS Annual meeting, March 15, 2014, New Orleans, LA. Scientific exhibit.
 178. Chalmers PN, Frank RM, Gupta AK, Yanke AB, Trenhaile SW, Romeo AA, Verma NN. All-Arthroscopic Patch Augmentation of a Massive Rotator Cuff Tear. AAOS Annual meeting, March 15, 2014, New Orleans, LA. Podium multimedia presentation. Selected as an Award Program.
 179. Frank RM, Chalmers PN, Gupta AK, Bhatia S, Cole BJ, Verma NN, Provencher MT, Romeo AA. Arthroscopic Distal Tibia Allograft for Management of Posterior Glenoid Bone Loss. AAOS Annual meeting, March 15, 2014, New Orleans, LA. Podium multimedia presentation.
 180. Chalmers PN, Walton D, Sporer SM, Levine BR. Synovial aspirate characteristics: do successful and failed total knee arthroplasties differ? MAOA Annual meeting, April 23-27, 2014, San Antonio, TX. Poster.
 181. Mall NA, Chalmers PN, Moric M, Tanaka MJ, Cole BJ, Bach BR, Paletta GA. Incidence and Trends of Anterior Cruciate Ligament Reconstruction in the United States. MAOA Annual meeting, April 23-27, 2014, San Antonio, TX. Podium.
 182. Chalmers PN, Cip J, Trombley R, Klosterman EL, Wimmer M, Cole BJ, Verma NN, Romeo AA. Upper Extremity Motion In The Overhand Pitch: Evaluation Of Tenodesis And Repair For SLAP Tears. MAOA Annual meeting, April 23-27, 2014, San Antonio, TX. Poster.
 183. Chalmers PN, Cip J, Trombley R, Klosterman EL, Wimmer M, Cole BJ, Verma NN, Romeo AA. Post-operative Restoration Of Neuromuscular Control During The Overhand Pitch: Evaluation Of Tenodesis And Repair For SLAP Tears. MAOA Annual meeting, April 23-27, 2014, San Antonio, TX. Poster.
 184. Walton D, Chalmers PN, Sporer SM, Levine BR. Synovial Inflammatory Response to the Failed Metal-On-Metal Total Hip Arthroplasty. MAOA Annual meeting, April 23-27, 2014, San Antonio, TX. Poster.
 185. Cip J, Chalmers PN, Trombley B, Klostermann E, Wimmer MA, Cole BJ, Verma NN, Romeo AA.: Bewegung im Schultergelenk während dem Überkopfwurf: Evaluation von Tenodese und SLAP-Repair bei SLAP-Läsionen. Akzeptiert für den Kongress der

- Österreichischen Gesellschaft für Orthopädie und orthopädische Chirurgie (ÖGO); 12 – 14. September 2013, Krems, Österreich.
186. Cip J, Chalmers PN, Trombley B, Klostermann E, Wimmer MA, Cole BJ, Verma NN, Romeo AA.: Athleten-bezogene Outcome Scores für Überkopfwurfsportler: Evaluation von Tenodese und SLAP-Repair bei SLAP-Läsionen. Akzeptiert als Poster für den Kongress der Österreichischen Gesellschaft für Orthopädie und orthopädische Chirurgie (ÖGO); 12 – 14. September 2013, Krems, Österreich.
 187. Cip J, Chalmers PN, Trombley B, Klostermann E, Wimmer MA, Cole BJ, Verma NN, Romeo AA.: Die postoperative Wiederherstellung der neuromuskulären Kontrolle während des Überkopfwurfes: Evaluation von Tenodese und SLAP-Repair bei SLAP Läsionen. Akzeptiert als Präsentation für den Kongress der Österreichischen Gesellschaft für Orthopädie und orthopädische Chirurgie (ÖGO); 12 – 14. September 2013, Krems, Österreich.
 188. Cvetanovich G, Chalmers PN, Yanke AB, Gupta A, Klosterman E, Verma NN, Romeo AA. Measurement of Glenoid Depth: feasibility of osteoarticular glenoid grafts based on location. AAOS Annual meeting, March 15, 2014, New Orleans, LA. Podium presentation.
 189. Chalmers PN, Walton D, Sporer SM, Levine BR. Synovial aspirate characteristics: do successful and failed total knee arthroplasties differ? AAOS Annual meeting, March 15, 2014, New Orleans, LA. Poster.
 190. Chalmers PN, Cvetanovich G, Yanke AB, Gupta A, Klosterman E, Verma NN, Romeo AA. Measurement of Glenoid Depth: feasibility of osteoarticular glenoid grafts based on location. 32nd Annual Meeting of the Arthroscopy Association of North America, April 25-27, 2013, San Antonio, Texas. Poster.
 191. Yanke AB, Chalmers PN, Verma NN, Romeo AA. Biceps Tenodesis: Open Subpectoral and Arthroscopic Technique. 80th Annual Meeting of the American Academy of Orthopaedic Surgeons. March 19-23, 2013, Chicago, IL. Multimedial podium presentation.
 192. Chalmers PN, Hudak K, Sporer SM, Levine BR. Correlation of aspiration results with the etiology of aseptic failure in total knee arthroplasty. 2013 Annual Meeting of the Mid-America Orthopaedic Association. April 17-21, Amelia Island, FL. Poster.
 193. Chalmers PN, Mall NA, Sherman SL, Paletta GP, Bach BR. Does anterior cruciate ligament reconstruction alter natural history?: A systematic review of long-term outcomes. 2013 Annual Meeting of the Mid-America Orthopaedic Association. April 17-21, Amelia Island, FL. Podium presentation.
 194. Chalmers PN, Hudak K, Sporer SM, Levine BR. Correlation of aspiration results with the etiology of aseptic failure in total hip arthroplasty. 2013 Annual Meeting of the Mid-America Orthopaedic Association. April 17-21, Amelia Island, FL. Podium presentation.
 195. Chalmers PN, Mall NA, Sherman, SL, Paletta GP, Bach BR. Does anterior cruciate ligament reconstruction alter natural history?: A systematic review of long-term outcomes. 80th Annual Meeting of the American Academy of Orthopaedic Surgeons. March 19-23, 2013, Chicago, IL. Podium presentation.
 196. Chalmers PN, Hudak K, Sporer SM, Levine BR. Correlation of aspiration results with the etiology of aseptic failure in total hip arthroplasty. 80th Annual Meeting of the American Academy of Orthopaedic Surgeons. March 19-23, 2013, Chicago, IL. Podium presentation. Featured in *AAOS Now*.

197. Chalmers PN, Karas V, Sherman SL, Cole BJ. Return to High-Level Sport Following Meniscal Allograft Transplantation. 80th Annual Meeting of the American Academy of Orthopaedic Surgeons. March 19-23, 2013, Chicago, IL. Podium presentation.
198. Chalmers PN, Hudak K, Sporer SM, Levine BR. Correlation of aspiration results with the etiology of aseptic failure in total knee arthroplasty. 22nd Annual Meeting of the American Association of Hip and Knee Surgeons. November 2-4, 2012, Dallas, TX. Poster.
199. Karas V, Chalmers P, Sherman S, Cole B. Return to High-Level Sport following Meniscal Allograft Transplantation. Herodicus Society Annual Meeting. Sun Valley, Idaho. June 21, 2011. Podium presentation.
200. Chalmers PN, Yanke AB, Sherman SL, Karas V, Cole BJ. Combined Realignment and Cartilage Restoration for a Patellar Chondral Lesions. 79th Annual Meeting of the American Academy of Orthopaedic Surgeons, February 7-11, 2012, San Francisco, CA. Multimedial podium presentation
201. Simcock XC, Yoon RS, Chalmers P, Geller JA, Kiernan HA, Macaulay W. Intraoperative music reduces perceived pain after total knee arthroplasty: a blinded, prospective, randomized, placebo-controlled clinical trial. Orthopedic Research Society Annual Meeting. March 3-5, 2008, San Francisco, CA. Podium presentation.
202. Simcock XC, Yoon RS, Chalmers P, Geller JA, Kiernan HA, Macaulay W. Intraoperative music reduces perceived pain after total knee arthroplasty: a blinded, prospective, randomized, placebo-controlled clinical trial. Annual meeting of the American Orthopaedic Association, 2008. Podium presentation.

Invited Presentations

1. Chalmers PN. Management of Ulnar Collateral Ligament Tears: Where Do We Stand in 2023? AOSSM Annual Meeting. 14 July 2023. Washington DC. Instructional Course Lecture Faculty.
2. Chalmers PN. Management of the Massive Cuff Tear. AAOS Webinar. April, 2023. Virtual. Moderator.
3. Chalmers PN. Shoulder Arthroplasty Session 2. ASES Specialty Day. March 4, 2023. Las Vegas, NV. Moderator.
4. Chalmers PN. Elbow Ulnar Collateral Ligament Tears in 2023: Evaluation and Management. AAOS Annual Meeting. March 4, 2023. Las Vegas, NV.
5. Chalmers PN. How to do a subscapularis-sparing total shoulder arthroplasty. Tampa Shoulder Course. February 23, 2023. Tampa, FL.
6. Chalmers PN. CT. vs MRI. What is the optimal pre-operative arthroplasty imaging study. Tampa Shoulder Course. February 23, 2023. Tampa, FL.
7. Chalmers PN. The Young & Active Degenerative Shoulder – Not Happy – The Current Role of Arthroscopic Surgery. Tampa Shoulder Course. February 23, 2023. Tampa, FL.
8. Chalmers PN. Throwing Shoulder Case Presentations. Tampa Shoulder Course. February 23, 2023. Tampa, FL.
9. Chalmers PN. Technology/Techniques for Shoulder Arthroplasty. Critical Concepts in Shoulder & Elbow Surgery. October 14, 2022. Las Vegas, NV.
10. Chalmers PN. Difficult Instability Cases. Critical Concepts in Shoulder & Elbow Surgery. October 14, 2022. Las Vegas, NV.

11. Chalmers PN. Latissimus Transfer. Critical Concepts in Shoulder & Elbow Surgery. October 14, 2022. Las Vegas, NV.
12. Chalmers PN. Lower Trapezius Transfer: Current Data and Indications. Critical Concepts in Shoulder & Elbow Surgery. October 14, 2022. Las Vegas, NV.
13. Chalmers PN. Treatment of Massive Cuff Tears. Critical Concepts in Shoulder & Elbow Surgery. October 14, 2022. Las Vegas, NV.
14. Chalmers PN. The Difficult Anatomic Total Shoulder Arthroplasty. Critical Concepts in Shoulder & Elbow Surgery. October 15, 2022. Las Vegas, NV.
15. Chalmers PN. Fracture of the Spine of the Scapula. Critical Concepts in Shoulder & Elbow Surgery. October 15, 2022. Las Vegas, NV.
16. Chalmers PN. Elbow Injuries – Sports and Soft Tissue Problems: How to Fix. American Shoulder and Elbow Surgeons Annual Meeting. October 8, 2022. Atlanta, GA.
17. Chalmers PN. Shoulder Arthroplasty Case-Based Symposium. American Shoulder and Elbow Surgeons Annual Meeting. October 7, 2022. Atlanta, GA.
18. Chalmers PN. The Middle Age Elbow - From Epicondylitis to Arthritis: The Expert Playbook To Treat The Most Common Issues. American Shoulder and Elbow Surgeons Annual Meeting. October 7, 2022. Atlanta, GA. Instructional Course Lecture.
19. Chalmers PN. Rotator Cuff Repair: Indications for Surgery. Western Orthopaedic Association. August 6, 2022. Wailea, HI.
20. Chalmers PN. Interval Throwing Program after Shoulder/Elbow Injury. AOSSM Annual Meeting. July 14, 2022. Colorado Springs, CO.
21. Chalmers PN. Case-Based Approach to Managing Complex Problems in the Young Adult: Arthritis, Irreparable Rotator Cuff, and Recurrent Instability. AOSSM Annual Meeting. July 14, 2022. Colorado Springs, CO.
22. Chalmers PN. Tear Pattern Recognition and Matching the Repair to It. San Diego Shoulder Institute Annual Meeting. June 15, 2022. San Diego, CA.
23. Chalmers PN. Open Latarjet: How To Do It and Avoid Complications. San Diego Shoulder Institute Annual Meeting. June 16, 2022. San Diego, CA.
24. Chalmers PN. Scapulothoracic Bursectomy: Indications and Technique. San Diego Shoulder Institute Annual Meeting. June 18, 2022. San Diego, CA.
25. Chalmers PN. Superior Glenoid Inclination and Acromial Morphology: Do they Play a Role in the Etiology of Rotator Cuff Tears? Nice Shoulder Course. Nice, France. June 10, 2022.
26. Micoci G, Chalmers PN. The Overtensioned Biceps Tenodesis As a Cause of Persistent Postoperative Shoulder Pain. Nice Shoulder Course. Nice, France. June 10, 2022.
27. Chalmers PN. In Vivo 3D motion in RSA using Fluoroscopy: Learning about RSA Kinematics and Scapulothoracic Motion. Nice Shoulder Course. Nice, France. June 11, 2022.
28. Chalmers PN. Failed Posterior Shoulder Instability Surgery. AAOS Webinar. May 10, 2022. *Virtual*.
29. Chalmers PN. Osteochondral Allografting for Capitellar Osteochondral Defects. AAOS Webinar. April 26, 2022. *Virtual*.
30. Chalmers PN. Reverse Total Shoulder Arthroplasty After Superior Capsular Reconstruction. AAOS Webinar. April 12, 2022. *Virtual*.
31. Chalmers PN. Injury Prevention in Baseball Players. Grand Rounds Webinar: Champion Sports Medicine. March 16, 2022. *Virtual*.

32. Chalmers PN. Injury Prevention in Baseball Players. 6 to 8: University of California San Francisco Sports Podcast. February 24, 2022. Virtual.
33. Chalmers PN. Pitcher Workload. Vanderbilt Sports Medicine Baseball Course. February 11, 2022. Nashville, TN.
34. Chalmers PN. How Good are We? UCL evaluation and outcomes. Vanderbilt Sports Medicine Baseball Course. February 11, 2022. Nashville, TN.
35. Chalmers PN. What's New with Glenohumeral Osteoarthritis? Etiology, Progression & Genetics. Advanced Shoulder Arthroplasty Meeting. January 20-22, 2022. Snowbird, UT.
36. Chalmers PN. Pre-operative computed tomographic planning for glenohumeral osteoarthritis. Advanced Shoulder Arthroplasty Meeting. January 20-22, 2022. Snowbird, UT
37. Chalmers PN. Management of the 80 Year Old with osteoarthritis, stiffness, and an intact rotator cuff. Advanced Shoulder Arthroplasty Meeting. January 20-22, 2022. Snowbird, UT
38. Chalmers PN. Management of the 55 Year Old with osteoarthritis and a supraspinatus tear. Advanced Shoulder Arthroplasty Meeting. January 20-22, 2022. Snowbird, UT
39. Chalmers PN. Video Presentation - ORIF Peri-prosthetic Fracture With Stable Humeral Stem. Advanced Shoulder Arthroplasty Meeting. January 20-22, 2022. Snowbird, UT
40. Chalmers PN. Prevention of Infection in 2021 - Preps, Patient Factors, Intraoperative Techniques. Advanced Shoulder Arthroplasty Meeting. January 20-22, 2022. Snowbird, UT
41. Chalmers PN. Proximal Humeral Fracture Nailing. December 12, 2021. Orthopaedic Summit 2021. December 12, 2021. Las Vegas, NV.
42. Chalmers PN. Proximal Humerus & Clavicle Fractures & Nonunions, Periprosthetic & Humeral Shaft Fractures: The Good, The Bad, The Ugly. Orthopaedic Summit 2021. December 12, 2021. Las Vegas, NV.
43. Chalmers PN. Total Elbow Arthroplasty Has It's Role: What I Have Learned To Forge Forward. Orthopaedic Summer 2021. December 12, 2021. Las Vegas, NV.
44. Chalmers PN. Replace It With A Total Elbow! Don't Torment Retirees Just Because They Are Active. Orthopaedic Summer 2021. December 12, 2021. Las Vegas, NV.
45. Chalmers PN. Physical Examination of the Shoulder. Baseball Sports Medicine: Game Changing Concepts. November 16-18, 2021. Virtual Secondary to COVID-19.
46. Chalmers PN. Case Panel Member on Shoulder Injuries. Baseball Sports Medicine: Game Changing Concepts. November 16-18, 2021. Virtual Secondary to COVID-19.
47. Chalmers PN. UCL Injury Epidemic and Prevention. Baseball Sports Medicine: Game Changing Concepts. November 16-18, 2021. Virtual Secondary to COVID-19.
48. Chalmers PN. Case Panel Member on Elbow Injuries. Baseball Sports Medicine: Game Changing Concepts. November 16-18, 2021. Virtual Secondary to COVID-19.
49. Chalmers PN. The Effects of Estrogen and Tenascin C on the Mechanics and Biology of Rotator Cuff Repairs in a Murine Model. LS Peery Discovery Program Annual Meeting. November 15, 2021.
50. Chalmers PN. Lateral Clavicle Fractures. ICJR 10th Annual Shoulder Course. Oct 7-9. Las Vegas, NV.
51. Chalmers PN. The Voluntary Dislocator: How Do I Manage? ICJR 10th Annual Shoulder Course. Oct 7-9. Las Vegas, NV.
52. Chalmers PN. Technique Review: Lat Transfer – Is It Really That Easy? ICJR 10th Annual Shoulder Course. Oct 7-9. Las Vegas, NV.

53. Chalmers PN. Terrible Triad Injuries. ICJR 10th Annual Shoulder Course. Oct 7-9. Las Vegas, NV.
54. Chalmers PN. Ulnar Collateral Ligament Injuries: Where Do We Stand in 2020? AAOS Annual Meeting, September 2, 2021. San Diego, CA. Instructional Course Lecture.
55. Chalmers PN. How to Avoid Instability After Reverse Total Shoulder Arthroplasty. AAOS Annual Meeting, September 2, 2021. San Diego, CA. Instructional Course Lecture.
56. Chalmers PN. Workload Management in the Youth Athlete. An Instructional Course Lecture for The Thrower's Shoulder. AOSSM Annual Meeting. Nashville, TN. July 9, 2021.
57. Chalmers PN. No Bone? No Problem. How to Successfully Manage Glenohumeral Instability with Bone Loss. AOSSM Annual Meeting. Nashville, TN. July 9, 2021.
58. Chalmers PN. Ulnar Collateral Ligament Tears in Baseball: Etiology and Prevention. 47th Annual Meeting of the Japanese Orthopaedic Society for Sports Medicine. Sapporo, Japan. June 18, 2021. *Virtual Secondary to COVID-19.*
59. Chalmers PN. Total Shoulder Arthroplasty: Augmented and Standard Components. AAOS Webinar. June 8, 2021. *Virtual.*
60. Chalmers PN. Shoulder Instability Case Panel. San Diego Shoulder Institute. San Diego, CA. June 6, 2021. *Virtual Secondary to COVID-19.*
61. Chalmers PN. Open Latarjet: How to Do It and Avoid Complications. San Diego Shoulder Institute. San Diego, CA. June 6, 2021. *Virtual Secondary to COVID-19.*
62. Chalmers PN. Ulnar Collateral Ligament Injuries in Overhead Throwers. AAOS Webinar. May 17, 2021. *Virtual.*
63. Chalmers PN. Shoulder Instability: How to Tackle Complex Problems. AAOS Webinar. April 6, 2021. *Virtual.*
64. Chalmers PN. Workload Management in Orthopaedics. Professional Baseball Physical Therapists Society Annual Meeting. January 20, 2021. *Virtual secondary to COVID-19.*
65. Chalmers PN. Physical Examination of the Thrower's Shoulder. 5th Annual Baseball Sports Medicine. November 17, 2020. *Virtual secondary to COVID-19.*
66. Chalmers PN. Ulnar Collateral Ligament Repair and Reconstruction. Intermountain Health Care Shoulder and Elbow Grand Rounds. November 12, 2020. *Virtual secondary to COVID-19.*
67. Chalmers PN, Erickson BJ. Pitching Mechanics. Conte Injury Analytics Webinar. November 11, 2020. *Virtual secondary to COVID-19.*
68. Chalmers PN, Erickson BJ. Defining Success in Return to Play. Conte Injury Analytics Webinar. November 11, 2020. *Virtual secondary to COVID-19.*
69. Chalmers PN. Bone Loss in Glenohumeral Instability: How to measure it. AOSSM Fellows Webinar. November 10, 2020. *Virtual secondary to COVID-19.*
70. Chalmers PN. Chat Master for "Best Papers" Session. American Shoulder and Elbow Surgeons Annual Meeting. October 3, 2020. *Virtual secondary to COVID-19.*
71. Chalmers PN. Neck Shaft Angle Decision Making. Reverse Shoulder Virtual Insights Course. September 15, 2020. *Virtual secondary to COVID-19.*
72. Chalmers PN. Scapular morphology contributions to instability, rotator cuff tears, and osteoarthritis. Detroit Medical Center Grand Rounds. September 9, 2020.
73. Chalmers PN. How and why to prevent pitching injuries. Detroit Medical Center Grand Rounds. September 9, 2020.

74. Chalmers PN. No Bone? No Problem. How to Successfully Manage Glenohumeral Instability with Bone Loss. AOSSM Annual Meeting. Seattle, WA. July 9-12, 2020. *Virtual secondary to COVID-19.*
75. Chalmers PN. Ulnar Collateral Ligament Injuries: 2020 Treatment Strategies. AOSSM Annual Meeting. Seattle, WA. July 9-12, 2020. *Virtual secondary to COVID-19.*
76. Chalmers PN, Boileau P. Overtensioning as a complication of biceps tenodesis. Nice Shoulder Course. Nice, France. July 6-9, 2020. *Virtual secondary to COVID-19.*
77. Chalmers PN. Tear Pattern Recognition and Matching the Repair to it. San Diego Shoulder Institute. San Diego, CA. June 17-20, 2020. *Canceled Secondary to COVID-19.*
78. Chalmers PN. Adolescent and Teenage Overhead Athletes. San Diego Shoulder Institute. San Diego, CA. June 17-20, 2020. *Canceled Secondary to COVID-19.*
79. Chalmers PN. Open Latarjet: How to Do It and Avoid Complications. San Diego Shoulder Institute. San Diego, CA. June 17-20, 2020. *Canceled Secondary to COVID-19.*
80. Chalmers PN. Reverse Total Shoulder Arthroplasty After Superior Capsular Reconstruction. AAOS Webinar. May 19, 2020. Virtual.
81. Chalmers PN. Managing Massive Rotator Cuff Tears. Depuy Fellows Arthroscopy Course. May 18, 2020. Virtual.
82. Chalmers PN. Medial Epicondyle Stress Reactions and Fractures in the Adolescent Athlete: Diagnosis, Treatment, and Prevention. AAOS Annual Meeting, March 27, 2020. Orlando, FL. Instructional Course Lecture. *Canceled Secondary to COVID-19.*
83. Chalmers PN. Humeral Neck Angle in Reverse Shoulder Arthroplasty. Depuy Fellows Arthroplasty Course. March 6, 2020. Phoenix, AZ.
84. Chalmers PN. Glenoid Exposure: Tips and Pearls. Depuy Fellows Arthroplasty Course. March 6, 2020. Phoenix, AZ.
85. Chalmers PN. Humeral Periprosthetic Fracture - Non-op vs Fix vs Revise - Indications and Outcomes. Advanced Shoulder Arthroplasty Meeting. Snowbird, UT. January 16-18, 2020.
86. Chalmers PN. Depuy Arthroplasty Cases. Advanced Shoulder Arthroplasty Meeting. Snowbird, UT. January 16-18, 2020.
87. Chalmers PN. Understanding the Mystery of the Humerus – Definitions. Advanced Shoulder Arthroplasty Meeting. Snowbird, UT. January 16-18, 2020.
88. Chalmers PN. Pre-operative Planning with Depuy. Advanced Shoulder Arthroplasty Meeting. Snowbird, UT. January 16-18, 2020.
89. Chalmers PN. Moderator for Biomechanics Section. 2019 MLB Winter Meetings Research Meeting. San Diego, CA. December 6, 2019.
90. Chalmers PN. Current Concepts in Workload Monitoring: When Does a Day Off Prevent Injury and Enhance Performance? 4th Annual Baseball Sports Medicine Meeting. New York City, NY. November 21, 2019.
91. Chalmers PN. Elbow Biomechanics. 4th Annual Baseball Sports Medicine Meeting. New York City, NY. November 21, 2019.
92. Chalmers PN. Pitching Flaws and UCL Injury. 4th Annual Baseball Sports Medicine Meeting. New York City, NY. November 21, 2019.
93. Chalmers PN. Massive Rotator Cuff Tears: Strategies & Techniques. Depuy Shoulder Fellows Course. Tampa, FL. November 7, 2019.
94. Chalmers PN. Reverse Shoulder Arthroplasty: Design Rationale & Surgical Technique. Depuy Shoulder Fellows Course. Tampa, FL. November 7, 2019.

95. Chalmers PN. Subscapularis tears. AOSSM Surgical Skills Course: Cutting Edge 2019 Shoulder and Elbow Sports Surgery: An Open and Arthroscopic Journey to Treat Common and Advanced Conditions of the Shoulder and Elbow. Rosemont, IL. October 11-12, 2019.
96. Abboud JA, Navarro RA, Chalmers PN, Frank RM, Levy JC, Murthi AM, Tashjian RZ. Panelist for Candidate Member Session. ASES Annual Meeting. New York, NY. October 18, 2019.
97. Chalmers PN. Moderator for Youth Athlete Section. AOSSM Annual Meeting. Boston, MA. July 12, 2019.
98. Makhni EC, Chalmers PN, Savoie F, Ahmad CS. The Youth Throwing Dilemma: Emerging Paradigms for Injury Prevention and Treatment. AOSSM Annual Meeting. Boston, MA. July 12, 2019.
99. Cvetanovich G, Chalmers PN, Brockmeier S, Ma B, Bishop J. Shoulder Instability and the Management of Bone Loss. AOSSM Annual Meeting. Boston, MA. July 12, 2019.
100. Chalmers PN. Biceps Tenodesis: Where and how? ASES Specialty Day. Las Vegas, NV. March 16, 2019.
101. Chalmers PN, Frank RM. Decision Making for Complex Shoulder Problems: A Case-Based Approach. AAOS Annual Meeting, March 12, 2019. Las Vegas, NV. Symposium.
102. Chalmers PN, Levine BR. Antibiotic Stewardship in Orthopaedic Surgery: Principles and Practice. AAOS Annual Meeting, March 14, 2019. Las Vegas, NV. Instructional Course Lecture.
103. Chalmers PN. Elbow instability and lateral ligament tears. 3rd Annual Sports Medicine Symposium. Park City, UT. February 23, 2019.
104. Chalmers PN. Rotator cuff disease in the aging athlete. 3rd Annual Sports Medicine Symposium. Park City, UT. February 23, 2019.
105. Chalmers PN. First Clinic Visit: It's Dislocated! Advanced Shoulder Arthroplasty Program. Park City, UT. January 11, 2019.
106. Chalmers PN. Factors affecting outcomes and survivability after Total Shoulder Arthroplasty. Advanced Shoulder Arthroplasty Program. Park City, UT. January 11, 2019.
107. Chalmers PN. Fracture Management in the Elderly, with Dr. John Itamura, Dr. Daniel Mole, and Dr. Bradford Parson. ASES Annual Meeting. Chicago, IL. October 11, 2018.
108. Chalmers PN. Moderator for Youth Athlete Section. AOSSM Annual Meeting. San Diego, CA. July 5-8, 2018.
109. Chalmers PN, Boileau P. Biceps Over-tensioning During Tenodesis. Nice Shoulder Course. Nice, France. June 1, 2018.
110. Chalmers PN. Antibiotic stewardship for outpatient surgery. *Within* Antibiotic Stewardship, led by Levine BR. 2018 AAOS Annual Meeting. New Orleans, LA. March 6-10, 2018. Instructional Course Lecture.
111. Chalmers PN. Ulnar Collateral Ligament Injuries. 2nd Annual Sports Medicine Symposium: The Pediatric Athlete. Park City, UT. March 3, 2018.
112. Chalmers PN. Shoulder Instability. 2nd Annual Sports Medicine Symposium: The Pediatric Athlete. Park City, UT. March 3, 2018.
113. Chalmers PN. The Ulnar Collateral Ligament Tear Epidemic. Baseball Sports Medicine: Game Changing Concepts. New York, NY. Nov 16-17, 2017.
114. Chalmers PN. Adolescent Pitching Mechanics and Pitch Counts. Baseball Sports Medicine: Game Changing Concepts. New York, NY. Nov 16-17, 2017.

115. Chalmers PN. Antibiotic stewardship for outpatient surgery. *Within Antibiotic Stewardship*, led by Levine BR. 2017 AAOS Annual Meeting. San Diego, CA. March 14-18, 2017. Instructional Course Lecture.
116. Mahkni EC, Chalmers PN, Gundle K, Swart E, Fabricant P. Clinical Research: Getting off the Ground. 2017 AAOS Annual Meeting. San Diego, CA. March 14-18, 2017. Symposium.
117. Chalmers PN. Adolescent Pitching Mechanics and Pitch Counts. *Baseball Sports Medicine: Game Changing Concepts*. New York, NY. Nov 3-4, 2016.
118. Chalmers PN. Little Leaguer's Shoulder. *Baseball Sports Medicine: Game Changing Concepts*. New York, NY. Nov 3-4, 2016.

In-house Podium Presentations

1. Chalmers P. Capitellar Osteochondral Defect. University of Utah Core Lecture. Salt Lake City, UT. September 30, 2022.
2. Chalmers P. Humerus Fractures. University of Utah Trauma Core Lecture. Salt Lake City, UT. August 3, 2022.
3. Chalmers P. Shoulder Anatomy. University of Utah Core Lecture. Salt Lake City, UT. July 29, 2022.
4. Chalmers P. Shoulder Instability. University of Utah Sports Core Lecture. Salt Lake City, UT. March 4, 2022.
5. Chalmers P. Elbow Instability. University of Utah Sports Core Lecture. Salt Lake City, UT. February 25, 2022.
6. Chalmers P. Shoulder Anatomy. University of Utah Core Lecture. Salt Lake City, UT. August 27, 2021.
7. Chalmers P. Humerus Fractures. University of Utah Trauma Core Lecture. Salt Lake City, UT. August 4, 2021.
8. Chalmers P. Elbow Instability. University of Utah Sports Core Lecture. Salt Lake City, UT. March 26, 2021.
9. Chalmers P. Shoulder Instability. University of Utah Sports Core Lecture. Salt Lake City, UT. March 5, 2021.
10. Chalmers P. Pitching-related injuries. University of Utah Sports Core Lecture. Salt Lake City, UT. September 18, 2020.
11. Chalmers P. Humerus Fractures. University of Utah Trauma Core Lecture. Salt Lake City, UT. August 26, 2020.
12. Chalmers P. Rotator Cuff Tears. University of Utah Sports Core Lecture. Salt Lake City, UT. September 27, 2019.
13. Chalmers P. Humerus Fractures. University of Utah Trauma Core Lecture. Salt Lake City, UT. September 4, 2019.
14. Chalmers P. Proximal humerus fractures. University of Utah Sports Core Lecture. Salt Lake City, UT. March 22, 2019.
15. Chalmers P. Shoulder Instability. University of Utah Sports Core Lecture. Salt Lake City, UT. February 22, 2019.
16. Chalmers P. AAOS Review. University of Utah Orthopaedic Grand Rounds. Salt Lake City, UT. February 13, 2019.
17. Chalmers P. Shoulder Fractures. University of Utah Trauma Core Lecture. Salt Lake City, UT. July 11, 2018.

18. Chalmers P. Elbow instability. University of Utah Sports Core Lecture. Salt Lake City, UT. March 16, 2018.
19. Chalmers P. Proximal humerus fractures. University of Utah Sports Core Lecture. Salt Lake City, UT. March 2, 2018.
20. Chalmers P. Rotator Cuff Tears. University of Utah Sports Core Lecture. Salt Lake City, UT. December 22, 2017.
21. Chalmers P. Management of Acute Proximal and Mid-Shaft Humerus Fractures. University of Utah Physical Medicine and Rehabilitation Core Lecture. Salt Lake City, UT. December 21, 2017.
22. Chalmers P. Traveling Fellowship. University of Utah Grand Rounds. Salt Lake City, UT. September 20, 2017.
23. Chalmers P. Humerus fractures. University of Utah Trauma Core Lecture. Salt Lake City, UT. August 2, 2017.
24. Chalmers P. Quadrilateral Space Syndrome. University of Utah Physical Medicine and Rehabilitation Core Lecture. Salt Lake City, UT. April 11, 2017.
25. Chalmers P. Throwing Injuries. University of Utah Sports Core Lecture. Salt Lake City, UT. February 17, 2017.
26. Chalmers P, Keener J. Anterior Shoulder Instability. Washington University Medical Center Orthopaedic Grand Rounds. Saint Louis, MO. October 28, 2015.
27. Chalmers P, Chamberlain AM. Shoulder & Elbow Interactive: Selected Cases. Washington University Medical Center Orthopaedic CORE Curriculum. Saint Louis, MO. October 22, 2015.
28. Chalmers P. The role of motion analysis in the prevention and treatment of youth pitching-related upper extremity injuries. Rush University Medical Center Thesis Day. Chicago, IL. June 19, 2015.
29. Chalmers P, Yanke AB. The Sports Section of the Orthopaedic In-Training Examination. Rush University Medical Center Department of Orthopaedic Surgery Core Curriculum. Chicago, IL. Oct. 20, 2014.
30. Chalmers P, Phillips F. Cervical Spine Anatomy and Physical Examination. Rush University Medical Center Department of Orthopaedic Surgery Core Curriculum. Chicago, IL. July 21, 2014.
31. Chalmers P, Nho SJ. Gluteus Maximum Transfer for Abductor Deficiency. Rush University Medical Center Department of Orthopaedic Surgery Grand Rounds. Chicago, IL. July 9, 2014.
32. Chalmers P, Romeo AA. Glenohumeral Instability and Arthropathy. Rush University Medical Center Department of Orthopaedic Surgery Grand Rounds. Chicago, IL. May 21, 2014.
33. Chalmers P, Cohen MS. Distal Humerus Fractures. Rush University Medical Center Department of Orthopaedic Surgery Core Curriculum. Chicago, IL. March 3, 2014.
34. Chalmers P, Rosenberg AG. Management of proximal tibial bone loss in revision total knee arthroplasty. Rush University Medical Center Department of Orthopaedic Surgery Grand Rounds. Chicago, IL. January 8, 2014.
35. Chalmers P, Lin J. Calcaneal Fractures. Rush University Medical Center Department of Orthopaedic Surgery Core Curriculum. Chicago, IL. December 16, 2013.
36. Chalmers P, Nicholson GP. Reverse Total Shoulder Arthroplasty: Balancing Biomechanics in a Nonanatomic Prosthesis. Third Annual OREF-Andersson Lectureship with Dr. Joseph Zuckerman. Chicago, IL. August 14, 2013.

37. Chalmers P, Wysocki RW. Elbow Anatomy and Physical Examination. Rush University Medical Center Department of Orthopaedic Surgery Core Curriculum. Chicago, IL. August 5, 2013.
38. Chalmers P, Nho S. Arthroscopic management of femoracetabular impingement in the setting of excess femoral anteversion. Rush University Medical Center Department of Orthopaedic Surgery Grand Rounds. Chicago, IL. January 2, 2013.
39. Chalmers P, Jacobs JJ. Anatomy of the hip and thigh. Rush University Medical Center Department of Orthopaedic Surgery Core Curriculum. Chicago, IL. December 17, 2012.
40. Chalmers P, Gitelis S. Scapulectomy for Ewing's Sarcoma. Rush University Medical Center Department of Orthopaedic Surgery Grand Rounds. Chicago, IL. December 5, 2012.
41. Chalmers P, Romeo AA. SLAP tears and the role of the long-head of the biceps tendon in the overhead athlete. Second Annual OREF-Andersson Lectureship with Dr. James Andrews. Chicago, IL. August 17, 2012.
42. Chalmers P, Lee S. Anatomy of the leg and ankle. Rush University Medical Center Department of Orthopaedic Surgery Core Curriculum. Chicago, IL. November 14, 2011.
43. Chalmers P, Della Valle CV. Antibiotic Cement Spacers: Design, Outcomes, and Complications. First Annual OREF-Andersson Lectureship with Dr. Daniel Berry. Chicago, IL. October 14, 2011.
44. Chalmers P, Lin J. Posterior Tibialis Tendon Insufficiency. Rush University Medical Center Department of Orthopaedic Surgery Grand Rounds. Chicago, IL. December 21, 2011.

Certification

Physician License (12884C), State of Wyoming	2020
Physician License (20055), State of Nevada	2020
Physician License (MC-0530), State of Idaho	2020
Physician License (61711), State of Arizona	2020
Physician License (88558), State of Montana	2020
Physician License (CDR.0000783), State of Colorado	2020
Basic Cardiac Life Support, American Heart Association (Renewal)	2022
Basic Cardiac Life Support, American Heart Association (Renewal)	2020
Basic Cardiac Life Support, American Heart Association (Renewal)	2018
Physician License (#9847729-1205), State of Utah	2016
Advanced Cardiac Life Support, American Heart Association (Renewal)	2016
American Board of Orthopaedic Surgery, Board Eligible, 97 th percentile	2015
Physician License (#2015005950), State of Missouri	2015
Advanced Cardiac Life Support, American Heart Association (Renewal)	2014
Advanced Cardiac Life Support, American Heart Association (Renewal)	2012
USMLE, Step 3	2011
Physician License (#125-057732), State of Illinois	2010
Advanced Cardiac Life Support, American Heart Association	2010
USMLE, Step 2 CK, CS	2009
USMLE, Step 1	2008

Professional Societies

American Orthopaedic Society for Sports Medicine	2019 - Present
American Shoulder and Elbow Surgeons (ASES), Candidate Member	2017 – 2019
American Shoulder and Elbow Surgeons (ASES), Associate Member	2019 – Present
Arthroscopy Association of North America (AANA)	2013 – 2018
American Academy of Orthopaedic Surgeons (AAOS)	2010 – Present

Extracurricular Clinical and Surgical Education

- American Association of Hip and Knee Surgeons Resident Course
Dallas, TX, November 4-6, 2011, Director: Craig J. Della Valle, MD
- Arbeitsgemeinschaft für Osteosynthesefragen, Basic Principles of Operative Fractures
New Orleans, LA, January 19-22, 2011, Director: Paul Gladden, MD
- Orthopaedic Trauma Association, Comprehensive Fracture Course for Residents
Chicago, IL, April 25-28, 2011, Director: Gregory Della Rocca, MD
- AAOS/AOSSM, Fundamentals of Knee and Shoulder Arthroscopy for Orthopaedic Residents
Rosemont, IL, September 14-16, 2012, Director: Andrew Cosgarea MD; Jon Sekiya, MD
- Musculoskeletal Clinicopathologic Course
Chicago, IL, October 8-10, 2012, Director: Rex Haydon, MD, Ph. D
- AAOS/ASES Shoulder Arthroplasty: State of the Art
Rosemont, IL, November 15-17, 2012, Director: Evan Flatow, MD; John Sperling, MD
- Arthroscopy Association of North America Resident's Course
Rosemont, IL, January 17-20, 2013, Director: William Ciccone, MD
- Pathophysiologic Background of Orthopaedic Disorders
Chicago, IL, April 27-28, 2013, Directors: Alan Schiller, MD; Andrew Rosenberg, MD
- AAOS/ASES Arthroscopic Management of Rotator Cuff Disease and Instability
Rosemont, IL, July 26-27, 2013, Directors: Craig Satterlee, MD; April Armstrong, MD
- Clinician Scholar Career Development Program
Rosemont, IL, September 26-28, 2013, Director: Mathias P. Bostrom, MD
- AANA Master's Shoulder Course
Rosemont, IL, January 31-February 2, 2014, Director: Anthony A. Romeo, MD
- The Shoulder: Current Concepts on Sports, Trauma, and Reconstruction
San Antonio, TX, April 23, 2014, Director: Brian R. Wolf, MD, MS

Resident Leadership Forum, American Orthopaedic Association

Montreal, Canada, June 17-19, 2014, Director: Robert F. Ostrum, MD

AAOS/ASES 21st Century Elbow Reconstruction: Update on Concepts and Controversies

Rosemont, IL, November 14-15, 2014, Director: Brad Parsons, MD; Leesa Galatz, MD

Tornier Fellowship Course in Shoulder Arthroplasty

Las Vegas, NV, November 19-21, 2015, Director: Sean Churchill MD; Mike Freehill MD

AAOS/ASES Reverse Total Shoulder and Latarjet Procedures

Rosemont, IL, January 29-30, 2016, Directors: Anand Murthi, MD and Jay Keener, MD

Karen Zupko & Associates: ICD-10: Making It Work and Mastering Orthopaedic Coding 2016

Chicago, IL, April 29-30, 2016, Director: Karen Zupko

ORS/OREF/AAOS New Investigator Research Funding Workshop

Jacksonville, FL, May 13-14, 2016, Directors: James Iatridis, PhD; Kurt Spindler, MD

Traveling fellowship: Nice, France; Birmingham, AL; Los Angeles, CA

August 15-October 17 2016, Directors: Pascal Boileau MD PhD, Lyle Cain MD, Jeff Dugas MD, James Andrews MD, Robert Grumet MD, Michael Shepherd MD

Tohoku University Traveling Fellowship: Sendai, Japan

January, 2018, Directors: Eiji Itoi MD PhD and Nobuyuki Yamamoto, MD PhD

US BJI Young Investigator Initiative Grant Mentoring and Career Development Program

Spring, 2019, Director: Nancy Lane, MD PhD

Rush University Medical Center Department of Orthopaedic Surgery Motor Skills Courses

Knee Arthroscopy, October 23, 2010, Director: Bernard R. Bach, MD

Shoulder Arthroscopy, January 22, 2011, Director: Gregory P. Nicholson, MD

Hip Arthroscopy, March 2, 2011, Director: Shane J. Nho, MD

Shoulder Arthroscopy, July 23, 2011, Director: Anthony A. Romeo, MD

Knee Arthroscopy, October 15, 2011, Director: Charles A. Bush-Joseph, MD

Shoulder Arthroscopy, January 21, 2012, Director: Brian J. Cole, MD

Hip Arthroscopy, February 4, 2012, Director: Shane J. Nho, MD

Elbow Arthroscopy, March 10, 2012, Director: Robert W. Wysocki, MD

Knee Arthroscopy, April 21, 2012, Director: Shane J. Nho, MD

Shoulder Arthroscopy, July 21, 2012, Director: Anthony A. Romeo, MD

Knee Arthroscopy, October 13, 2012, Director: Brian Forsythe, MD

Shoulder Arthroscopy, January 12, 2013, Director: Bernard R. Bach, MD

Hip Arthroscopy, March 2, 2013, Director: Shane J. Nho, MD

Knee Arthroscopy, April 20, 2013, Director: Brian Forsythe, MD

Shoulder Arthroscopy, July 20, 2013, Director: Anthony A. Romeo, MD

Knee Arthroscopy, October 19, 2013, Director: Bernard R. Bach, MD

Shoulder Arthroscopy, January 11, 2014, Director: Gregory P. Nicholson, MD

Hip Arthroscopy, February 8, 2014, Director: Shane J. Nho, MD
 Knee Arthroscopy, April 19, 2014, Director: Nikhil N. Verma, MD
 Shoulder Arthroscopy, June 14, 2014, Director: Brian Forsythe, MD
 Knee Arthroscopy, October 18, 2015, Director: Bernard R. Bach, MD
 Elbow Arthroscopy, January 10, 2015, Director: Robert W. Wysocki, MD

Formal Research Positions

Hospital for Special Surgery, <i>Research Fellow</i> Principal Investigator: Daniel Green, MD, FACS	New York, NY 2007-2010
Columbia University, Dept. of Orthopedic Surgery, <i>Research Fellow</i> Principal Investigator: William Macaulay, MD, FACS	New York, NY 2007
Dartmouth College, Chemistry Department, <i>Senior Thesis</i> Chemistry thesis in the lab of Prof. F. Jon Kull	Hanover, NH January to June 2005

- Awarded the *Merck Award* for my research

Team Coverage

Salt Lake City Stallions American Association of Football, December 2018-May 2019
 Utah Jazz National Basketball Association Shoulder/Elbow Consultant: October 2017-Present
 University of Utah Baseball: October 2016-Present
 University of Utah Gymnastics Shoulder/Elbow Consultant: October 2016-Present
 University of Utah Tennis Shoulder/Elbow Consultant: October 2016-Present
 University of Utah Volleyball Shoulder/Elbow Consultant: October 2016-Present
 Salt Lake City Bees Professional AAA Baseball Team: October 2016-Present
 Nazareth Academy High School Football: November 15, 2014
 Rockford Icehogs Minor League Professional Hockey: February 21, 2014
 Chicago Force Women's Professional Football: Pre-participation physicals: February 2, 2013
 Roosevelt University Collegiate Men's and Women's Basketball: January- February, 2013
 Chicago Steel Semi-Professional Hockey: October 21, 2011, January 19, 2013, April 6, 2013
 Oak Park River Forest High School Football: September 29, 2012
 Chicago Mustangs Semi-Professional Football: June 23, 2012, August 4, 2012
 Morton High School Football: September 16, 2011

Mentorship

College Students: Lindsay Beck

Medical Students: Garrett Christensen, Matt Miller, Brad Hillyard, Cade Wheelwright, Karch Smith, Logan Thomas, Sam Simister, Christopher Clinker, Adrik Da Silva

Bioengineering PhD Candidates: Klevis Alajj, Tyler Knighton

Residents: I have personally trained 36 residents in shoulder and elbow surgery.

Fellows: I have personally trained 14 sports fellows.

Faculty: I have served as a mentor through the American Shoulder and Elbow Surgeons Society for Michael Boin, Eitan Kohan, Ryan Churchill, and Alberto Rivera. I serve as a mentor for Amy Cizik through a K application to the NIH.

Activities

Chair, Patient-Reported Outcomes and Questionnaires Governance University of Utah	January 2023-Present
Ex-Officio and Future Co-Chair, Fellow's Symposium American Shoulder and Elbow Surgeons	October 2022-Present
Taskforce Leader, Fellowship Value Taskforce American Shoulder and Elbow Surgeons	June 2022-Present
Committee Member, Technology Committee American Shoulder and Elbow Surgeons	October 2021-Present
Leader, Patient-Reported Outcomes Taskforce Department of Orthopaedic Surgery, University of Utah	April 2021-Present
Committee Member, Pitch Smart Injury Prevention Program Major League Baseball Commissioner's Office	January 2021-Present
Committee Member, Diversity and Inclusion Committee Department of Orthopaedic Surgery, University of Utah	October 2020-Present
Section Editor, Elbow Instability, Resident Curriculum American Association of Orthopaedic Surgeons	June 2020-June 2022
Podcast Host American Shoulder and Elbow Surgeons	July 2019-Present
Early Career Engagement and Mentorship Subcommittee American Shoulder and Elbow Surgeons	October 2019-Present
Abstract Review Panel Member American Shoulder and Elbow Surgeons	Oct 2018- Oct 2020
Shoulder/Elbow Knowledge Source Group American Board of Orthopaedic Surgery	May 2018-Present

Internet Presence Advisory Committee Department of Orthopaedic Surgery, University of Utah Medical Center	2016-2018
Residency Selection Committee, <i>Chief Resident Interviewer</i> Department of Orthopaedic Surgery, Rush University Medical Center	2014-2015
Academic Leadership Committee, American Orthopaedic Association	July 2013 – June 2015
Orthopaedic Liason, Association of Accredited Medical College	July 2013 – June 2015
Residency Class Supervisory Board Elected Representative Department of Orthopaedic Surgery, Rush University Medical Center	2011-2012
Licensing Committee on Medical Education o Clinical Academics Student Co-Chair, aiding in reaccrediting Columbia	2008-2010
Punahou School, Academy Science Department, <i>Faculty Member</i> Department Head: Darcy Iams, Program Director: Gerald Devlin Taught biology to high school freshmen, Coached distance running.	Honolulu, HI 2005-2006
Dartmouth Undergraduate Journal of Science (DUJS) <i>DUJS</i> mentioned in <i>Nature</i>	President 2003
Lightweight Rowing, Dartmouth College Set a Dartmouth ergometer record for the 2000 m distance	2001-2002
Eagle Scout, Boy Scouts of America	2000