

RYAN CHRISTOPHER KOONCE, MD, MBA

Entrepreneur | Orthopedic Surgeon | Consultant

Ryan@OrthoSkoool.com

EDUCATION AND MEDICAL TRAINING

1992 – 1996	University of Colorado at Boulder Bachelor of Science – Civil Engineering	Boulder, CO
1998 – 2000	University of Colorado at Denver Post-baccalaureate Premedical Coursework	Denver, CO
2001 – 2005	University of Colorado School of Medicine Doctor of Medicine	Denver, CO
2005 – 2010	University of Colorado Orthopaedic Surgery Residency Program	Denver, CO
2010 - 2011	San Diego Arthroscopy and Sports Medicine Fellowship Clinical fellowship for sports medicine surgery (hip, knee, shoulder)	San Diego, CA
2013 – 2014	Anderson Orthopaedic Research Institute Fellowship Clinical fellowship for hip and knee replacement surgery	Alexandria, VA
2024 – 2026	University of Denver Daniels College of Business Master of Business Administration (Executive MBA)	Denver, CO

EMPLOYMENT HISTORY

2011 – 2013	Skagit Regional Health <i>Orthopedic Surgeon</i>	Mount Vernon, WA
2014 – 2019	Colorado Permanente Medical Group / Kaiser Permanente CO <i>Orthopedic Surgeon</i>	Lone Tree, CO
2019 – 2026	University of Colorado School of Medicine <i>Orthopedic Surgeon and Assistant Professor</i> Website: www.RyanKoonceMD.com	Aurora, CO & Highlands Ranch, CO
2019 – Present	Vistic, LLC (dba OrthoSkoool) CEO and Co-Founder Website: www.orthoskoool.com	Lone Tree, CO
2019 – Present	OrthoSkoool Publishing LLC <i>Founder and Sole Proprietor</i>	Lone Tree, CO

AWARDS

March 2026	Beta Gamma Sigma Honor Society – University of Denver Executive MBA Program
November 2004	William Winter Award for Outstanding Medical Student in Orthopaedic Surgery
August 2010	Western Orthopaedic Association’s Sanford and Darlene Anzel Award

October 2018	The Permanente Award – Kaiser Permanente’s Highest Honor for Physicians
February 2022	Clinical Quality and Patient Safety Award – University of Colorado Hospital

PROFESSIONAL MEMBERSHIPS

2010 – Present	Fellow of the American Academy of Orthopaedic Surgeons
2014 – Present	Fellow of the American Association of Hip and Knee Surgeons

COMMITTEE AND LEADERSHIP APPOINTMENTS

2011 – 2013	Skagit Valley Hospital Electronic Medical Record Committee
2016 – 2019	Kaiser Permanente Regional Arthroplasty Value Advisor
2017 – 2018	Kaiser Permanente Venous Thromboembolism Workgroup
2017 – 2019	Kaiser Permanente Physician Champion for Outpatient Arthroplasty Program
2019 – 2022	Highlands Ranch Hospital Patient Safety and Quality Committee
2022 – 2023	UCHealth Highlands Ranch Hospital Credentialing Committee
2020 – 2023	AAOS Adult Reconstruction Hip Program Committee
2019 – Present	CU Department of Orthopedic Surgery Quality Committee
2020 – Present	CU Department of Orthopedic Surgery Adult Reconstruction Research Database Lead (PatientIQ)
2022 – Present	UCHealth Total Hip and Knee Metro Collaborative Case Review Committee
2022 – Present	UCHealth Total Hip and Knee Committee
2022 – Present	UCHealth Prosthetic Joint Infection Committee

MEDICAL LICENSURE AND BOARD CERTIFICATION

2005 – Present	Drug Enforcement Administration License
2006 – Present	State of Colorado Medical License
2013 – 2023	Diplomate of the American Board of Orthopaedic Surgery (expires December 31, 2033)

CONSULTING AND REVIEW WORK

2014 – 2022	Orthopaedic Consultant for the State of Colorado Medical Board
2016 – 2024	Reviewer for the Journal of Arthroplasty (Elsevier)
2022 – 2026	Reviewer for Orthopedics (Healio)

INVITED TEACHING LECTURES

May 2013	Primary care resident / medical student lecture	Mount Vernon, WA
December 2015	Orthopedic resident lecture for Adult Reconstruction	Aurora, CO
August 2016	Faculty for University of Colorado Resident Arthroplasty Course	Aurora, CO
August 2017	Faculty for University of Colorado Resident Arthroplasty Course	Aurora, CO
April 2019	University of Colorado Primary Care Conference	Parker, CO
August 2019	Faculty for University of Colorado Resident Arthroplasty Course	Aurora, CO
January 2020	Orthopaedic resident lecture for Adult Reconstruction	Aurora, CO
July 2020	Orthopaedic resident lecture for Adult Reconstruction	Aurora, CO
November 2020	Orthopaedic resident lecture for Adult Reconstruction	Aurora, CO
January 2021	Orthopaedic resident lecture for Adult Reconstruction	Aurora, CO
May 2021	Orthopaedic resident lecture for Adult Reconstruction	Aurora, CO
August 2021	Orthopaedic resident lecture for Adult Reconstruction	Aurora, CO
November 2021	Invited speaker at Wind Crest Senior Living	Highlands Ranch, CO
February 2022	Orthopaedic resident lecture for Adult Reconstruction	Aurora, CO
February 2022	Invited speaker for Athletic Trainers in the Physician Practice Society 2022 Annual Conference	Virtual
June 2022	Orthopaedic resident lecture for Adult Reconstruction	Aurora, CO
March 2022	Moderator for Adult Reconstruction Hip Paper Session IX AAOS Annual Meeting	Chicago, IL
August 2022	Invited speaker for Physician Assistants in Orthopaedic Surgery 2022 Annual Conference	Denver, CO
October 2022	Invited speaker for Vi at Highlands Ranch	Highlands Ranch, CO
October 2022	Orthopaedic resident lecture for Adult Reconstruction	Aurora, CO
November 2022	Invited speaker for Highlands Ranch Community Association	Highlands Ranch, CO
November 2023	Invited Speaker for Wind Crest Community	Highlands Ranch, CO
December 2024	Orthopaedic resident lecture for Adult Reconstruction	Aurora, CO

GRANT SUPPORT

March 2008

Principal Investigator for \$21,154 research grant awarded by Smith & Nephew Inc. (completed)

PEER-REVIEWED PUBLICATIONS

1. **Koonce R**, Lu C, Colnot C, Huang S, Miclau T, and Helms J. The Role of MEPE/Dentonin During Skeletal Development and Regeneration. *Journal of Investigative Medicine*. Abstract #510, 51(suppl 1): S180, 2003.
2. Ritvo J, **Koonce R**, Thurstone C, Causey H. Tramadol Dependence: Treatment with Buprenorphine/Naloxone. *American Journal of Addictions*. 2007; 16(1):67-8.
3. **Koonce R**, Price C, Sutton D, Wickes B, Montero P, Morgan S. Lower extremity zygomycosis in a patient with traumatic injuries. *Journal of Bone and Joint Surgery Am*. 2009; 91(3):686-92.
4. Carry P, **Koonce R**, Pan Z, Polousky JD. A Survey of Physician Opinion: Adolescent Clavicle Fracture Treatment Preferences Among POSNA Members. *Journal of Pediatric Orthopaedics*. 2011; 31(1):44-49.
5. Boublik M, Schlegel T, **Koonce R**, Genuario J, Lind C, Hamming D. Patellar tendon ruptures in professional football players. *American Journal of Sports Medicine*. 2011;39(11):2436-40.
6. Vidal A, **Koonce R**, Wolcott M, Gonzales J. Extensive Heterotopic Ossification After Suspensory Cortical Fixation of Acute Distal Biceps Tendon Ruptures. *Arthroscopy*. 2012;28(7):1036-40.
7. **Koonce R**, Baldini T, Morgan S. Are conventional reconstruction plates equivalent to precontoured locking plates for distal humerus fracture fixation? A biomechanics cadaver study. *Clinical Biomechanics*. 2012;27(7):697-701.
8. **Koonce R**, Bravman J. Obesity and osteoarthritis: more than just wear and tear. *Journal of the American Academy of Orthopaedic Surgeons*. 2013;21(3):161-9.
9. Singh A, **Koonce R**, Arora A. Biomechanical evaluation of a unicortical button versus interference screw for subpectoral biceps tenodesis. *Arthroscopy*. 2013;29(4):638-44.
10. Boublik M, Schlegel TF, **Koonce R**, Genuario JW, Kinkartz JD. Quadriceps tendon ruptures in National Football League Players. *American Journal of Sports Medicine*. 2013;41(8):1841-6.
11. Lee C, Davis S, Lane C, **Koonce R**, Hartman A, Ball K, Esch J. Reliability and Accuracy of Digital Templating for the Humeral Component of Total Shoulder Arthroplasty. *Shoulder & Elbow*. 2015; 7(1): 29-35.
12. Zeng C, **Koonce RC**, Tavel HM, Argosino SE, Kiepe DA, Lyons EE, Ford MA, Steiner CA. Pre-Operative Predictors for Discharge to Post-Acute Care Facilities After Total Knee Arthroplasty. *J Arthroplasty*. 2022 Jan;37(1):31-38.e2.
13. Meghan N Jeffres, Melissa Porter, Madison Ricco, Miranda Norvell, Craig Hogan, Eric Bassler, **Ryan Koonce**. Risk-benefit assessment of cefazolin use for surgical site infection prevention among patients allergic to penicillins and cephalosporins, *Open Forum Infectious Diseases*, Volume 9, Issue Supplement_2, December 2022.
14. Meghan N Jeffres, Melissa Porter, Madison Ricco, Miranda Norvell, **Ryan Koonce**, Eric Bassler, Craig Hogan, Risk of surgical site infection and *Clostridioides difficile* infection after perioperative clindamycin in patients labeled penicillin and/or cephalosporin allergic, *Open Forum Infectious Diseases*, Volume 9, Issue Supplement_2, December 2022.
15. Norvell M, Porter M, Ricco M, **Koonce RC**, Hogan C, Basler E, Wong M, Jeffres M, Cefazolin vs. second-line antibiotics for surgical site infection prevention after total joint arthroplasty among patients with a beta-lactam allergy, *Open Forum Infectious Diseases*, published April 2023.

16. Cheuy V, Stevens-Lapsley JE, Christiansen CL, Connors M, Peters A, **Koonce R**, Hogan C, Bade MJ. Effects of real-time biofeedback using instrumented insoles on recovery after total knee arthroplasty. *International Society for Technology in Arthroplasty*, Sept 2023.
17. Churchill L, John Bade M, **Koonce RC**, Stevens-Lapsley JE, Bandholm T. The past and future of peri-operative interventions to reduce arthrogenic quadriceps muscle inhibition after total knee arthroplasty: A narrative review. *Osteoarthr Cartil Open*. 2023 Dec 21;6(1):100429.
18. Marshall A, Bandholm T, Kleeman-Forsthuber L, **Koonce R**, Dennis D, Stevens-Lapsley J, Bade M. The Effect of Therapeutic Arthrocentesis on Quadriceps Activation, Strength, and Function in Individuals with Knee Osteoarthritis or after Total Knee Arthroplasty: An Exploratory Study. *Aca J Spo Sci & Med*. 1(5): 2024.
19. Robison JW, Wuthrich Z, Keeter CL, Dayton M, Hogan C, **Koonce R**. The Impact of Patient Resiliency on Successful Same-Day Discharge and Postoperative Outcomes in Primary Total Hip and Knee Arthroplasty. *J Arthroplasty*. 2024 Dec 16:S0883-5403(24)01292-0
20. Wanglin, C., Dayton, M., Hogan, C., **Koonce, R.**, Moreland, L. and David, M., 2024, September. Personalized Prediction of Pain and Function for Knee Osteoarthritis Patients 1 Year After Total Knee Arthroplasty Using Machine Learning. In *ARTHRITIS & RHEUMATOLOGY* (Vol. 76, pp. 4224-4226).
21. Bade MJ, Christiansen CL, Zeni JA, Dayton MR, Forster JE, Cheuy VA, Christensen JC, Hogan C, **Koonce R**, Dennis D, Peters A, Stevens-Lapsley JE. Movement Pattern Biofeedback Training after Total Knee Arthroplasty: A Randomized Controlled Trial. *Arthritis Care Res (Hoboken)*, 2024.
22. Clarke Z, **Koonce R**, Dayton MR, Hogan C, Jeffres M. Safety of Administering Cefazolin in Beta-Lactam Allergic Patients Undergoing Elective Orthopaedic Procedures. *The Journal of Arthroplasty*. 2025 May 22.

PODIUM AND POSTER PRESENTATIONS

1. **Koonce R**, Lu C, Colnot C, Huang S, Miclau T, Helms J. The Role of MEPE/Dentonin During Skeletal Development and Regeneration. Poster Presentation at 17th Annual Student Research Forum, University of Colorado Health Sciences Center, Denver, CO. October 2002.
2. **Koonce R**, Lu C, Colnot C, Huang S, Miclau T, Helms J. The Role of MEPE/Dentonin During Skeletal Development and Regeneration. Western Student Medical Research Forum, Carmel, CA. February 2003.
3. **Koonce R**, Carry P, Polousky JD. Treatment preferences for adolescent clavicle fractures among pediatric orthopaedists. Denver Children's Hospital Orthopaedic Day, Aurora, CO. June 2009.
4. **Koonce R**, Baldini T, Morgan S. Are conventional reconstruction plates equivalent to precontoured locking plates for distal humerus fracture fixation? Western Orthopaedic Association's 74th Annual Meeting, Monterey, CA. August 2010
5. **Koonce R**. Obesity and Osteoarthritis. Scripps Clinic Grand Rounds, La Jolla, CA. February 2011
6. **Koonce R**. Obesity and Osteoarthritis. University of California San Diego Department of Orthopaedic Surgery Grand Rounds, San Diego, CA. May 2011.
7. Lee C, Davis S, Lane CJ, **Koonce R**, Hartman A, Ball K, Esch J. The Reliability and Accuracy of Digital Templating for Primary Total Shoulder Arthroplasty. San Diego Shoulder Course, San Diego, CA. June 2014.
8. **Koonce R**, Melberg M, Robinson G, Montgomery K, Argosino S, Montrose S. Total Joint Patient Care Pathway. Kaiser Permanente 2017 National Quality Conference. Anaheim, CA. June 2017.

9. Clarke, Z; Hewitt, M, Buckley, S, Dayton, M, Hogan C, Hunt, K, **Koonce, R**. The Importance of Patient Resilience on Outcomes Following Hip and Knee Arthroplasty. Poster and Podium presentation at OREF Central West Region Resident Research Symposium, Aurora, CO. October, 2022.
10. Marshall A, **Koonce R**, Hogan C, Jennings J, Stevens-Lapsley J, Bade M. Combined Neuromuscular Electrical Stimulation and Blood Flow Restriction after Total Knee Arthroplasty: A Feasibility Study. Abstract accepted for presentation at APTA Combined Sections Meeting, San Diego, CA, Feb 2023.
11. Dayton M, Marshall A, **Koonce R**, Hogan C, Jennings J, Owens J, Stevens-Lapsley J, Bade M. Neuromuscular Electrical Stimulation and Blood Flow Restriction: Total Knee Arthroplasty. Western Orthopedic Association, Aug 2023.
12. Dayton M, Marshall A, Bandholm T, **Koonce R**, Dennis D, Hogan C, Stevens-Lapsley J, Bade M. Therapeutic Arthrocentesis in Individuals with Knee Osteoarthritis or TKA. Western Orthopedic Association, Aug 2023.
13. Clarke Z, Hogan C, Dayton M, Jeffres M, **Koonce R**. Safety of administering cefazolin in beta-lactam allergic patients undergoing orthopedic procedures. American Association of Hip and Knee Surgeons Annual Meeting, Nov 2024.
14. Capin, J.J., Bade, M.J., Zeni, J., Cheuy, V., Yang, C., Hogan, C., **Koonce, R.**, Foran, J., Christensen, J.C., Forster, J.E. and Stevens-Lapsley, J.E., 2025, February. Perioperative Predictors of Gait Biomechanics Six Months after Total Knee Arthroplasty. In 2025 Combined Sections Meeting (CSM). APTA.

BOOK CHAPTERS

1. **Koonce R**, Schmalzried T. Diagnosis of Pain in Metal on Metal Hips. The Hip: Preservation, Replacement, and Revision. Data Trace Publishing Company, 2015.

BOOK PUBLICATIONS

1. “Your Hip Replacement – A patient’s guide to understanding hip arthritis, preparing for surgery, maximizing your outcome.” OrthoSkool Publishing, 2019.
2. “Your Knee Replacement – A patient’s guide to understanding knee arthritis, preparing for surgery, maximizing your outcome.” OrthoSkool Publishing, 2019.
3. “Knee Osteoarthritis – An informative guide for patients.” OrthoSkool Publishing, 2019.
4. “Hip Osteoarthritis – An informative guide for patients.” OrthoSkool Publishing, 2019.

PERSONAL ACCOMPLISHMENTS

2016 – 2022 USA Triathlon Age Group All-American

2017 ITU Age Group World Championships Participant in Rotterdam, Netherlands (Team Canada)

5 X International Triathlon Union Age Group World Championships Qualifier (Team USA)

2019 USA Triathlon Long Course Aquabike (swim-bike) Age Group National Champion

2022 ITU Age Group World Championships Participant in Montreal, Canada (Team USA)

2023 Ironman Coeur d'Alene finisher