Orthopaedic Associates of Wisconsin N15 W28300 Golf Road Pewaukee, WI 53072

PRESENT APPOINTMENT

Orthopaedic Associates of Wisconsin, Pewaukee, WI

Orthopaedic Surgeon, Hip and Knee Replacement Specialist, September 2021 - Current

CERTIFICATION/LICENSURE

Medical License, State of WI – Active

American Board of Orthopaedic Surgeons, Board Certified, July 16, 2023 – Current

EDUCATION

University of Utah, Salt Lake City, UT

Fellow, Adult Reconstruction, August 2020 – July 2021

Rush University Medical Center, Chicago, IL

Resident Physician, Orthopaedic Surgery, July 2015 – July 2020

University of Wisconsin School of Medicine and Public Health, Madison, WI

Doctor of Medicine (MD), Alpha Omega Alpha Medical Honor Society, (Rank #1/156), 2011 - 2015

University of Wisconsin, Madison, WI

Bachelor of Science (BS), Biology with Honors, (Rank #1/3623, Letters & Science), 2006 – 2010

Saint Mary Central High School, Neenah, WI

Class Valedictorian, 2002 – 2006

HONORS AND AWARDS

Jon T. Mader Award for Best Clinical Research Project – Musculoskeletal Infection Society (2021)

Rush Orthopaedic Surgery Residency – Chief Resident Teaching Award (2020)

American Orthopedic Association (AOA) – Resident Leadership Forum, Nominee (2019)

American Academy of Orthopedic Surgery, International Committee, Resident Member (2019)

American Academy of Orthopedic Surgery Residency Assembly Delegate (2017-2018)

Graduation with Honors in Research, UW School of Medicine and Public Health (2015)

Medical Student Achievement in Orthopedics Award, UW Dept of Orthopedics and Rehabilitation (2015)

Alpha Omega Alpha Honor Medical Society (2014)

Class of 2007 Excellence in Orthopedic Surgery Research Award (2013)

AO Spine North America Resident Paper of the Year Award (2013)

Graduation with Academic Distinction, University of Wisconsin (2010)

United States Tennis Association (USTA) National Campus Championships, National Runner-Up (2010)

Francis C. Krauskopft Memorial Award for Top General Chemistry Student, University of WI (2007)

University of Wisconsin Medical Scholars Program (2006)

Saint Mary Central High School Class Valedictorian (2006)

Wisconsin High School State Tennis Singles Champion (2006)

RESEARCH PUBLICATIONS

- Kelly MP, Gililland JE, Blackburn BE, Anderson LA, Pelt CE, Peters CL, Certain LK. Extended Oral Antibiotics Increase Bacterial Resistance in Patients who Fail Two-Stage Exchange for Periprosthetic Joint Infection. *Journal of Arthroplasty*. 2022 Aug;37(8S):S989-S996. PMID: 35074446
- 2. **Kelly MP**, Calkins TE, Culvern C, Kogan M, Della Valle CJ. Inpatient versus Outpatient Hip and Knee Arthroplasty: Which has higher patient satisfaction? *Journal of Arthroplasty*. 2018 Nov;33(11):3402-3406. PMID: 30143333.
- 3. **Kelly MP**, Illgen RL, Chen AF, Nam D. An Analysis of Trends in the Use of High-Viscosity Cement in Patients Undergoing Primary Total Knee Arthroplasty. *Journal of Arthroplasty*. 2018 Nov;33(11):3460-3464. PMID: 30057268.
- 4. **Kelly MP**, Darrith B, Hannon CP, Nam D, Courtney PM, Della Valle CJ. Synovial Fluid Alpha-Defensin Is an Adjunctive Tool in the Equivocal Diagnosis of Periprosthetic Joint Infection. *Journal of Arthroplasty*. 2018 Nov;33(11):3537-3540. PMID: 30017218.
- 5. Fillingham YA, Della Valle CJ, Bohl DD, **Kelly MP**, Hall DJ, Pourzal R, Jacobs JJ. Serum Metal Levels for Diagnosis of Adverse Local Tissue Reactions Secondary to Corrosion in Metal-on-Polyethylene Total Hip Arthroplasty. *Journal of Arthroplasty*. 2017 Sep;32(9s):S272-S277. PMID: 28511949
- 6. Sershon RA, **Kelly MP**, Kogan M. Rush Orthopaedic Surgery Outreach to the Dominican Republic. *Rush Orthopedics Journal*. 2017.
- 7. Cotter EJ, Waterman BR, **Kelly MP**, Wang KC, Frank RM, Cole BJ. Multiple Osteochondral Allograft Transplantation with Concomitant Tibial Tubercle Osteotomy for Multifocal Chondral Disease of the Knee. *Arthroscopy Techniques*. 2017 Aug 21;6(4):e1393-e1398. PMID: 29354446
- 8. **Kelly MP**, Colman MW. Computer Navigation-Assisted Musculoskeletal Tumor Surgery: Update and Presentation of 4 Clinical Cases. *Rush Orthopedics Journal*. 2016.
- 9. Savage JW, **Kelly MP**, Ellison SA, Anderson PA. A population-based review of bone morphogenetic protein: associated complication and reoperation rates after lumbar spinal fusion. *Neurosurg Focus*. 2015 Oct;39(4):E13. PMID: 26424337
- 10. **Kelly MP**, Perkinson SG, Ablove RH, Tueting JL. Distal biceps tendon ruptures: an epidemiological analysis using a large population database. *Am J Sports Med.* 2015 Aug;43(8):2012-7. PMID: 26063401
- 11. Rocque BG, **Kelly MP**, Miller JH, Li Y, Anderson PA. Bone morphogenetic protein-associated complications in pediatric spinal fusion in the early postoperative period: an analysis of 4658 patients and review of the literature. *J Neurosurg Pediatr*. 2014 Dec;14(6):635-43. PMID: 25303159
- 12. **Kelly MP**, Savage JW, Bentzen SM, Hsu WK, Ellison SA, Anderson PA. Cancer risk from bone morphogenetic protein exposure in spinal arthrodesis. *J Bone Joint Surg Am*. 2014 Sep 3;96(17):1417-22. PMID: 25187579. **Award: AO Spine North America Resident Paper of the Year Award**

13. **Kelly MP**, Franciose RJ, Lloyd GL. Successful salvage reimplantation of penile prosthesis after reservoir erosion into continent urinary reservoir. *Urology*. 2012 Nov;80(5):e63-64. PMID: 22981544

TEXTBOOK CHAPTERS

- 1. **Kelly MP**, Heckmann N, Jacobs JJ. "Complications of Total Hip Arthroplasty." Orthopaedic Knowledge Update: Hip and Knee Reconstruction, 6th Edition.
- 2. **Kelly MP**, Levine BL. "Push-Through Total Femur." Arthroplasty Fiascos: The Perils & Pitfalls of Managing Challenging Cases.
- 3. **Kelly MP**, Levine BL, Jacobs JJ, Sumner DR. "Implant Fixation." Adult Knee, 2nd Edition.
- 4. **Kelly MP**, Bush-Joseph C. "Arthroscopic Synovectomy of the Knee." DeLee & Drez's Orthopaedic Sports Medicine: Principles and Practice, 5th Edition.

RESEARCH PRESENTATIONS

- 1. **Kelly MP**, Gililland JE, Blackburn BE, Anderson LA, Pelt CE, Peters CL, Certain LK. Extended Oral Antibiotics Increase Bacterial Resistance in Patients who Fail Two-Stage Exchange for Periprosthetic Joint Infection. Musculoskeletal Infection Society. American Association of Hip and Knee Surgeons Annual Meeting. Dallas, TX. November 2021. (Podium presentation by: **Kelly MP**).
- Kelly MP, Gililland JE, Blackburn BE, Anderson LA, Pelt CE, Peters CL, Certain LK.
 Extended Oral Antibiotics Increase Bacterial Resistance in Patients who Fail Two-Stage
 Exchange for Periprosthetic Joint Infection. Musculoskeletal Infection Society. Fort
 Lauderdale, FL. August 2021. (Podium presentation by: Certain LK). Award: Jon T. Mader
 Award for Best Clinical Research Project at MSIS Annual Meeting
- 3. **Kelly MP**, Calkins TE, Culvern C, Kogan M, Della Valle CJ. Inpatient versus Outpatient Hip and Knee Arthroplasty: Which has higher patient satisfaction? Mid-America Orthopaedic Association Annual Meeting. Sandestin, FL. April 2019. (Podium presentation by: **Kelly MP**).
- 4. **Kelly MP**, Calkins TE, Culvern C, Kogan M, Della Valle CJ. Inpatient versus Outpatient Hip and Knee Arthroplasty: Which has higher patient satisfaction? American Academy of Orthopedic Surgery Annual Meeting. Las Vegas, NV. March 2019. (Podium presentation by: **Kelly MP**).
- 5. **Kelly MP**, Darrith B, Hannon CP, Nam D, Courtney PM, Della Valle CJ. Selective Use of Synovial Fluid Alpha-defensin Can Guide Management in The Equivocal Diagnosis of Periprosthetic Joint Infection. Mid-America Orthopaedic Association Annual Meeting. San Antonio, TX. April 2018. (Poster).

- 6. Hannon CP, **Kelly MP**, Darrith B, Calkins TE, Patel G, Buvanendran A, Della Valle CJ. Reducing Opioid Use in Orthopaedic Surgery Patients. American Academy of Orthopedic Surgery Annual Meeting. New Orleans, LA. March 2018. (Scientific Exhibit).
- 7. **Kelly MP**, Darrith B, Hannon CP, Nam D, Courtney PM, Della Valle CJ. Selective Use of Synovial Fluid Alpha-defensin Can Guide Management in The Equivocal Diagnosis of Periprosthetic Joint Infection. American Academy of Orthopedic Surgery Annual Meeting. New Orleans, LA. March 2018. (Poster).
- 8. **Kelly MP**, Darrith B, Hannon CP, Nam D, Courtney PM, Della Valle CJ. Selective Use of Synovial Fluid Alpha-defensin Can Guide Management in The Equivocal Diagnosis of Periprosthetic Joint Infection. Musculoskeletal Infection Society. Boston, MA. August 2017. (ePoster presented by: Courtney PM).
- 9. Fillingham YA, Della Valle CJ, Bohl DD, **Kelly MP**, Hall DJ, Pourzal R, Jacobs JJ. Serum metal levels for diagnosis of adverse local tissue reactions secondary to corrosion in metal-on-polyethylene total hip arthroplasty. Mid-America Orthopaedic Association Annual Meeting. Amelia Island, FL. May 2017. (Podium presentation by: **Kelly MP**).
- 10. Fillingham YA, Della Valle CJ, Bohl DD, **Kelly MP**, Hall DJ, Pourzal R, Jacobs JJ. Serum metal levels for the diagnosis of adverse local tissue reaction in metal-on-polyethylene total hip arthroplasty. 2017 Annual Meeting of the American Academy of Orthopaedic Surgeons. San Diego, CA. March 2017. (Poster).
- 11. Fillingham YA, Della Valle CJ, Bohl DD, **Kelly MP**, Hall DJ, Pourzal R, Jacobs JJ. Serum metal levels for the diagnosis of adverse local tissue reaction in metal-on-polyethylene total hip arthroplasty. British Hip Society Annual 2017 Meeting. Westminster, London. March 2017. (Podium presentation by: Della Valle CJ).
- 12. Fillingham YA, Della Valle CJ, Bohl DD, **Kelly MP**, Hall DJ, Pourzal R, Jacobs JJ. Serum metal levels for the diagnosis of adverse local tissue reaction in metal-on-polyethylene total hip arthroplasty. 26th Annual Meeting of the American Association of Hip and Knee Surgeons. Dallas, TX. 2016 Nov 10-13. (Podium presentation by: Fillingham YA).
- 13. Rocque BG, **Kelly MP**, Anderson PA. Bone morphogenetic protein in pediatric spinal fusion: prevalence and complications. AANS/CNS Section on Pediatric Neurological Surgery Annual Meeting. Toronto, Canada. December 2013. Abstract.
- 14. **Kelly MP**, Savage JW, Bentzen SM, Hsu WK, Ellison SA, Anderson PA. Cancer risk from bone morphogenetic protein exposure in spinal fusion. Lumbar Spine Research Society Annual Meeting. Chicago, IL. April 2013. (Podium presentation by: **Kelly MP**).
- 15. **Kelly MP**, Savage JW, Bentzen SM, Hsu WK, Ellison SA, Anderson PA. Cancer risk from bone morphogenetic protein exposure in spinal fusion. University of Wisconsin School of Medicine and Public Health 11th Annual Medical Student Research Forum. Madison, WI. October 2012. (Podium presentation by: **Kelly MP**).
- 16. **Kelly MP,** Smith AM, Cezar GG. Metabolic profiling of cancer cells. University of Wisconsin Medical Scholars Research Symposium. Madison, WI. August 2008. (Podium presentation by: **Kelly MP**).

- 17. **Kelly MP**, Quam JA, Cezar GG. Ethanol increases apoptosis in hES cell-derived neural precursors. University of Wisconsin Undergraduate Research Symposium. Madison, WI. May 2008. (Podium presentation by: **Kelly MP**).
- 18. **Kelly MP**, Georgen RF. Impact of bariatric surgery on medical co-morbidities of patients of varying economic status in Wisconsin. University of Wisconsin Medical Scholars Research Symposium. Madison, WI. August 2007. (Podium presentation by: **Kelly MP**).

LANGUAGES

Spanish: Reading, writing, and speaking proficiency, including medical terminology