

## Dr. Samuel Carlson Publications & Presentations – September 2023

## **RESEARCH PUBLICATIONS**

- 1. Mcgee-lawrence ME, Bradley EW, Dudakovic A, **Carlson SW** et al. Histone deacetylase 3 is required for maintenance of bone mass during aging. Bone. 2013;52(1):296-307.
- 2. **Carlson SW,** Carlson WO. NP vs. PA: what is the difference?. S D Med. 2014;67(2):61-3, 65.
- 3. Carlson SW, Magee S, Carlson WO. An algorithm for the evaluation and treatment of sacroiliac joint dysfunction. S D Med. 2014;67(11):445-9, 451.
- Carlson SW, Goetz DD, Liu SS, Greiner JJ, Callaghan JJ. Contemporary Ream-and-Broach Tapered Cementless Components: Better than Broach-Only at Minimum 10-Year Follow-Up? J Arthroplasty. 2016 May 11.
- Carlson SW, Liu SS, Callaghan JJ. Not all cementless femoral stems are created equal but the results may be comparable. Bone Joint J. 2017 Jan;00;B(1 Supple A): 14-17. PMID: 28042113.
- Wyles CC, Vargas-Hernandez JS, Carlson SW, Carlson BC, Sierra RJ. Single-Dose Perioperative Antibiotics Do Not Increase the Risk of Surgical Site Infection in Unicompartmental Knee Arthroplasty. Journal of Arthroplasty 2019 Jul;34(7S):S327-330
- 7. **Carlson SW** and Sierra RJ. Unicompartmental knee arthroplasty over total knee arthroplasty: a more cost-effective strategy for treating medial compartment arthritis. Ann Transl Med. 2020 Apr;9(7):510.
- 8. **Carlson SW**, Sierra RJ, Trousdale RT. Total hip arthroplasty in patients with osteogenesis imperfecta. J Arthroplasty. 2020 Mar; epub ahead of print.
- Carlson SW, Vargas-Hernandez JS, Sierra RJ. Lack of bone-on-bone arthritis is not a strict contraindication for mobile-bearing unicompartmental knee arthroplasty. JBJS Open Access. 2020 Jul;5(3).
- Carlson SW, Gausden EB, Trousdale RT. A surgical technique to avoid mediolateral overhang in total knee arthroplasty. Carlson SW, Gausden EB, Trousdale RT. Arthroplasty Today. 2021 Feb;7:235-237.
- 11. Bedard NA, Saltzman CL, Den Hartog T, **Carlson SW**, Callaghan JJ, Alvine G, Alvine F. The agility total ankle arthroplasty: a concise follow-up at a minimum of 20 years. Foot Ankle Int. 2021 Oct;42(10):1241-1244.
- Lenartowicz KA, Wyles CC, Carlson SW, Sierra RJ, Trousdale RT. Prevalence of groin pain after primary dual mobility total hip arthroplasty. Hip International. 2023 Mar;33(2):214-220.

13. Labott JR, **Carlson SW**, Lee SH, and Sierra RJ. Femur-first technique for mobile bearing unicompartmental knee arthroplasty results in decreased implant variability and early improvements in function and survivorship. J Arthroplasty. 2023 Jun;38(6S):S60-S65.

## **BOOK CHAPTERS**

1. Carlson SW and Taunton MJ. "Diagnosing and Managing Complications of Direct Anterior Total Hip Arthroplasty." Anterior Hip Replacement: From Origin to Current Advanced Techniques, Matta JM and Sah AP. Springer, 2022. 137-146.

## PRESENTATIONS

- 1. Garceau-Wray Lectureship Indiana University Department of Orthopaedic Surgery, June 2023. **Carlson SW**, Levey S, Ziemba- Davis M, Meneghini RM, Buller LT. Bypassing cortical defects during conversion total hip arthroplasty: is it necessary to use a diaphyseal engaging stem? Podium presentation.
- 2. American Academy of Orthopaedic Surgeons, March 2023. Labott JR, **Carlson SW**, Lee SH, and Sierra RJ. Femur-first technique for mobile bearing unicompartmental knee arthroplasty results in decreased implant variability and early improvements in function and survivorship. Poster Presentation.
- American Association of Hip and Knee Surgeons, November 2020. An Uncemented Femoral Stem Was Extremely Durable: 99.9% 10-Year Survival Free from Aseptic Loosening. Statz JM, Maly C, Carlson SW, Abdel MP, Hanssen AD, Pagnano MW, Perry KI. Poster presentation.
- Mid-America Orthopedic Association, April 2020. Successful results of TKA in patients with severe flexion contractures. Carlson SW, Parkes CW, Trousdale RT, Sierra RJ. Podium presentation.
- 5. Mid-America Orthopedic Association, April 2020. Total hip arthroplasty in patients with osteogenesis imperfect. **Carlson SW**, Sierra RJ. Trousdale RT. Poster presentation.
- American Academy of Orthopaedic Surgeons, March 2020. Successful results of TKA in patients with severe flexion contractures. Carlson SW, Parkes CW, Trousdale RT, Sierra RJ. Poster presentation.
- American Academy of Orthopaedic Surgeons, March 2020. Total hip arthroplasty in patients with osteogenesis imperfecta. Carlson SW, Sierra RJ. Trousdale RT. Poster presentation.
- American Academy of Orthopaedic Surgeons, March 2020. Outcomes of surgical management of closed periprosthetic distal femur fractures above total knee arthroplasties. Labott JR, Carlson SW, Cross WW, Sems A, Yuan BJ. Podium presentation.

- 9. American Association of Hip and Knee Surgeons, November 2019. Prevalence of groin pain after primary dual mobility total hip arthroplasty Lenartowicz KA, Wyles CC, **Carlson SW**, Sierra RJ, Trousdale RT. Poster presentation.
- Minnesota Orthopedic Society, May 2019. Bone on bone. Lack of bone-on-bone arthritis is not a strict contraindication for mobile-bearing unicompartmental knee arthroplasty. Wyles CC, Carlson SW, Vargas-Hernandez J, Carlson BC, Sierra RJ. Podium presentation.
- Minnesota Orthopedic Society, May 2019. Single-Dose Perioperative Antibiotics Do Not Increase the Risk of Periprosthetic Joint Infection in Unicompartmental Knee Arthroplasty. Carlson SW, Vargas-Hernandez J, Carlson BC, Sierra RJ. Podium presentation.
- 12. Minnesota Orthopedic Society, May 2019. BMI ≥30 Does not significantly influence survivorship of medial unicompartmental knee arthroplasty at minimum two-year follow-up. Vargas Hernandez J, **Carlson SW**, Carlson BC, Sierra RJ. Poster presentation.
- 13. Mid-America Orthopedic Association, April 2019. Single-Dose Perioperative Antibiotics Do Not Increase the Risk of Surgical Site Infection in Unicompartmental Knee Arthroplasty. Wyles CC, Vargas JS, Carlson SW, Carlson BC, Sierra RJ. Podium presentation.
- 14. Mid-America Orthopedic Association, April 2019. The Lack of Bone on Bone Contact in the Medial Compartment Should not be a Strict Contraindication for Mobile-Bearing UKA. Vargas JS, Carlson SW, Carlson BC, Sierra RJ. Poster presentation.
- 15. American Academy of Orthopaedic Surgeons, March 2019. A lack of bone-on-bone arthritis is not a strict contraindication for mobile-bearing unicompartmental knee arthroplasty. **Carlson SW**, Vargas JS, Carlson BC, Sierra RJ. Podium presentation.
- 16. American Academy of Orthopaedic Surgeons, March 2019. BMI greater than 30 does not significantly influence survivorship of mobile-bearing unicompartmental knee arthroplasty at minimum two-year follow-up. Vargas JS, Carlson SW, Carlson BC, Sierra RJ. Poster presentation.
- 17. American Association of Hip and Knee Surgeons, November 2018. Single-Dose Perioperative Antibiotics Do Not Increase the Risk of Surgical Site Infection in Unicompartmental Knee Arthroplasty. Wyles CC, Vargas JS, **Carlson SW**, Carlson BC, Sierra RJ. Poster presentation.
- Mid-America Orthopedic Association, April 2017. Minimum 20 Year Follow-Up of a Semiconstrained Total Ankle Arthroplasty: A Benchmark for Future Designs. Den Hartog T, Carlson SW, Den Hartog B, Callaghan JJ, Alvine GF, Alvine F. Podium presentation.
- 19. American Academy of Orthopaedic Surgeons, March 2017. Minimum 20 Year Follow-Up of a Semiconstrained Total Ankle Arthroplasty: A Benchmark for

Future Designs. Den Hartog T, **Carlson SW**, Den Hartog B, Callaghan JJ, Alvine GF, Alvine F. Podium presentation.

- 20. Orthopedic Research Society Annual Meeting, March 2016. Contemporary Ream-and-Broach Tapered Cementless Components: Better than Broach-Only at Minimum 10-Year Follow-Up? **Carlson SW**, Goetz DD, Liu SS, Callaghan, JJ. Poster presentation.
- 21. Orthopedic Research Society Annual Meeting, March 2016. Cementing Constrained Liners into Secure Cementless Shells: A Minimum 15-year Follow-Up. Amendola RL, **Carlson SW**, Abdel MP, Goetz DD, Lewallen DG, Callaghan JJ. Poster presentation.
- 22. Carver College of Medicine Medical Student Research Day, September 2014. Contemporary Ream-and-Broach Tapered Cementless Components: Better than Broach-Only at Minimum 10-Year Follow-Up? **Carlson SW**, Goetz DD, Liu SS, Callaghan, JJ. Poster presentation.
- 23. St. Olaf College Biology Distinction Presentation, May 2013. Poster presentation.
- 24. Mayo Clinic Summer Undergraduate Research Fellowship, July 2012. Conditional knockout of histone deacetylase 3 in mature osteoblasts causes decreased bone formation due to increased osteoblast apoptosis. **Carlson SW**, Mcgee-lawrence ME, Westendorf JJ. Poster presentation.
- Mayo Clinic Summer Undergraduate Research Fellowship, July 2011. Histone deacetylase 3 is required for maintenance of bone mass during aging. Carlson SW,