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### EDUCATION

University of Colorado , Physical Medicine and Rehabilitation, Aurora, CO  
Postdoctoral Fellow , September 2019 ±September 2021

University of Delaware , Biomechanics and Movement Science, Newark, DE  
Doctor of Philosophy , August 2019

University of Delaware , Physical Therapy, Newark, DE  
Doctor of Physical Therapy , December 2014

University of Delaware , Physical Therapy, Newark, DE  
Master of Science in Anatomy and Clq 06r/F2 000912 0 2()-4(Th)4(H)6(a)6( )6-3(or )-hanience

Teaching and



11. Jolley S, Nordon-Craft A, Wilson MP, Ridgeway K, Rauzi MR, Capin J, Heery LM, Stevens-Lapsley J, Erlandson KM. Disparities in the allocation of inpatient physical and occupational therapy services for patients with COVID-19. *J Hosp Med.* 2022 Feb;17(2):88-95. doi: 10.1002/jhm.12785. PMID: 35446466; PMCID: PMC9088325.
12. Williams JR, Neal K, Fayyadh AB, Lennon K, Capin JJ, Khandha A, Manal K, Potter H, Snyder-Mackler L, Buchanan TS. Knee Cartilage T2 Relaxation Times 3 Months after ACL Reconstruction Are Associated with Knee Gait Variables Linked to Knee Osteoarthritis. *Journal of Orthopaedic Research.* 2022 Jan;40(1):252-259. doi: 10.1002/jor.25043. PMID: 33783867; PMCID: PMC8481340.
13. Zarzycki R, Arhos EK, Failla M, Capin JJ, Smith AH, Snyder-Mackler L. Positive

22. Capin JJ , Williams JR, Neal K, Khandha A, Durkee L, Ito N, Stefanik JJ, Snyder-Mackler L, Buchanan TS. Slower walking speed is related to early femoral trochlear cartilage degradation after ACL reconstruction. *Journal of Orthopaedic Research*. 2020

33. Zarzycki R, Failla M, Capin JJ, Snyder-Mackler L. Psychological Readiness to Return to Sport is Associated with Knee Kinematic Asymmetry During Gait Following ACL Reconstruction. *Journal of Orthopaedic and Sports Physical Therapy*. 2018; 48(12):968-973. doi: 10.2519/jospt.2018.8084. PMID: 30053791; PMCID: PMC6501559.
34. Capin JJ, Khandha A, Zarzycki R, Manal K, Buchanan TS, Snyder-Mackler L. Gait mechanics and second ACL rupture: Implications for delaying return-to-sport. *Journal of Orthopaedic Research*. 2017;35(9):1894-1901. doi:10.1002/jor.23476. PMID: 27859527; PMCID: PMC5423861.
35. \*Capin JJ, Behrns W, Thatcher K, Arundale A, Smith AH, Snyder-Mackler, AH. Clinical Commentary: On-ice return-to-hockey progression after anterior cruciate ligament reconstruction. *Journal of Orthopaedic and Sports Physical Therapy*. 2017;47(5):324-333. doi: 10.2519/jospt.2017.7245. PMID: 28355976; PMCID: PMC5480966. \*Article featured on cover of May 2017 issue of JOSPT.
36. Capin JJ, Zarzycki R, Arundale AJH, Cummer K, Snyder-Mackler L. Report of the Primary Outcomes for Gait Mechanics in Men of the ACL-SPORTS Trial: Secondary Prevention With and Without Perturbation Training Does Not Restore Gait Symmetry in Men 1 or 2 Years After ACL Reconstruction. *Clinical Orthopaedics and Related Research*. 2017;475(10):2513-2522. doi: 10.1007/s11999-017-5279-8. PMID: 28224442; PMCID: PMC5599383.
37. Arundale AJH, Cummer K, Capin JJ, Zarzycki R, Snyder-Mackler L. Report of the Clinical and Functional Primary Outcomes in Men of the ACL-SPORTS Trial: Similar Outcomes in Men Receiving Secondary Prevention With and Without Perturbation Training 1 and 2 Years After ACL Reconstruction. *Clinical Orthopaedics and Related Research*. 2017;475(10):2523-2534. doi: 10.1007/s11999-017-5280-2. PMID: 28224443; PMCID: PMC5599384.
38. Khandha A, Manal K, Wellsandt E, Capin J, Snyder-Mackler L, Buchanan T. Gait mechanics in those with/without medial compartment knee osteoarthritis five years after anterior cruciate ligament reconstruction. *Journal of Orthopaedic Research*. 2017;35(3):625-633. doi 10.1002/jor.23261. PMID: 27082166; PMCID: PMC5065735.

#### BOOK CHAPTERS

1. Arhos EK, Capin JJ, Risberg MA, Snyder-Mackler L. Extended Preoperative RehabilTm 0 g B00.82 608.5 Tm 0 g 0 G [( )] TJ ET Q q 0.0000091Tf 1 (8(G)-4(ai)6(6) TJ .000009

INVITED PRESENTATIONS: NATIONAL/INTERNATIONAL

1. Capin JJ , et al. Student-Researcher Roundtable Session. Invited Speaker for Roundtable Discussion. Combined Sections Meeting of the American Physical Therapy Association (CSM 2023): San Diego, CA, February 24, 2023.
2. Capin JJ 0 L O O V ' 1 R U P D Q ( < R X ¶ Y H J R W - Marquette Challenge K D W ¶ V Q H Event. Foundation for Physical Therapy Research. Webinar. March 28, 2022.
3. Capin JJ , Segal R,





MENTORING (PRIOR TO MARQUETTE UNIVERSITY)

Masters Level | Committee Member | University of Colorado, Aurora, CO

- Eliza Biondi, BA; Master of Human Anatomy, Capstone Research Project, 2020-2021

Undergraduate Level | University of Delaware, Newark, DE, 2016-2019

- Laura Durkee, Winter Session Intensive Research Experience, Winter 2019; ACL Lab research assistant, Spring 2019
- Georgia Gagianas, Summer Scholar,



5. Williams JR, Neal K, Alfayyadh A, Capin JJ , Khandha A, Manal K, Snyder-Mackler L, Buchanan TS. Is Persistent Loading Symmetry After ACL Reconstruction The Key To Maintaining Long Term Cartilage Health? Podium Presentation. Orthopaedic Research Society (ORS) 2022 Annual Meeting: Tampa, FL, February 7, 2022.
6. Liles S, Ito N, Capin JJ , Hall S, Silbernagel K, Buchanan T, Snyder-Mackler L. Addition of Post-Operative Perturbation Training Does Not Eliminate Knee Loading Rate Asymmetries after ACL Reconstruction. Platform Presentation. Combined Sections Meeting of the American Physical Therapy Association (CSM 2022): San Antonio, TX, February 2-5, 2022.
7. Hinrichs L, Capin JJ , Judd D, Forster J, Samuelson M, McCandless M, Peters A, Christiansen C, Stevens-Lapsley J. Daily Step Count Is Not Associated with Gait Symmetry in Individuals with End-Stage Hip Osteoarthritis. Poster Presentation. Combined Sections Meeting of the American Physical Therapy Association (CSM 2022): San Antonio, TX, February 2-5, 2022. \*\*\*Selected as Top 10 Poster for Academy of Orthopaedic Physical Therapy.\*\*\*
8. Hall S, Ito N, Capin JJ , Silbernagel K, Buchanan T, Snyder-Mackler L. Men and Women Walk with Asymmetrical Quadriceps Neuromuscular Function Six Months after ACL Reconstruction. Poster Presentation. Combined Sections Meeting of the American Physical Therapy Association (CSM 2022): San Antonio, TX, February 2-5, 2022.
9. Ito N, Arhos E, Capin JJ , Hall S, Buchanan TS, Snyder-Mackler L. Walking Speed is More Strongly Associated with Knee Rate of Moment Development in the Uninvolved than the Involved Knee after Anterior Cruciate Ligament Reconstruction. Podium Presentation. 45<sup>th</sup> Annual Meeting of the American Society of Biomechanics (ASB): Virtual Conference, August 10-13, 2021.
10. Rauzi MR, Capin JJ , Nordon-Craft A, Jolley S, Flynn S, MaWhinney S, Morrow M, Erlandson KM, Stevens-Lapsley JE. The App-Facilitated Tele-Rehabilitation (AFTER) Program for COVID-19 Survivors: Protocol for a Randomized Feasibility Trial. Poster presentation. LeaRRN and

16.

27. Knobel R, Ito N, Capin JJ , Arhos E, Buchanan T, Snyder-Mackler L. Faster Walking Speed Is Associated with Greater Gait Asymmetry after Anterior Cruciate Ligament Reconstruction. Poster Presentation. Combined Sections Meeting of the American Physical Therapy Association (CSM 2020): Denver, CO, February 12-15, 2020.
28. Capin JJ , Khandha A, Williams JR, Durkee L, Neal K, Stefanik J, Snyder-Mackler L, Buchanan TS. Quadriceps Forces During Gait 3 Months after ACL Reconstruction Predict 6-Month Trochlear Cartilage T

37. Neal K, Williams JR, Khandha A, Capin JJ , Snyder-Mackler L, Buchanan TS. Comparison of Gait Asymmetries and Quantitative MRI Variables in Patellar Cartilage 6-Months Post ACL Reconstruction. Poster Presentation. Orthopaedic Research Society (ORS) 2019 Annual Meeting: Austin, TX, February 2-5, 2019.
38. Capin JJ, Zarzycki R, Johnson JL, Dix C, Arundale AJ, Smith AH, Snyder-Mackler L. Fear May Not Predict Functional Performance, Activity Level, or Second Injury Among Athletes Who Meet Objective Return-to-Sport Criteria after ACL Reconstruction. Poster Presentation. Combined Sections Meeting of the American Physical Therapy Association (CSM 2019): Washington, DC, January 23-26, 2019.
39. Ito N, Capin JJ , Khandha A, Manal K, Buchanan T, Snyder-Mackler L. The Effect of Mechanism of Injury on Gait Mechanics, Tibiofemoral Loading, and Response to Post-Operative Return-to-Sport (RTS) Training in Male Athletes after ACL Reconstruction (ACLR). Platform Presentation. Combined Sections Meeting of the American Physical Therapy Association (CSM 2019): Washington, DC, January 23-26, 2019.
40. Smith AH, Capin JJ , Zarzycki R, Snyder-Mackler L. 2nd ACL Injury Rates and Characteristics after Completion of a Secondary Prevention Program. Platform Presentation. Combined Sections Meeting of the American Physical Therapy Association (CSM 2019): Washington, DC, January 23-26, 2019.
41. Ito N, Capin JJ , Khandha A, Manal K, Buchanan T, Snyder-Mackler L. Sex and mechanism of injury (MOI) influence knee mechanics after anterior cruciate ligament reconstruction (ACLR). Thematic Poster Presentation. 42<sup>nd</sup> Annual Meeting of the American Society of Biomechanics (ASB): Rochester, MN, August 9, 2018.
42. Johnson JL, Capin JJ , Khandha A, Manal K, Buchanan T, Snyder-Mackler L. Gait Biomechanics Early After ACLR Do Not Predict Medial Compartment Joint Space Width 5 Years After ACLR. Poster Presentation. 42<sup>nd</sup> Annual Meeting of the American Society of Biomechanics (ASB): Rochester, MN, August 9, 2018.
43. Khandha A, Capin J , Williams JR, Manal K, Snyder-Mackler L, Buchanan TS. Correlation between inter-limb differences (ILDs) in knee biomechanical and biochemical variables 3 and 6 months after anterior cruciate ligament reconstruction (ACLR). Oral Presentation. World Congress of Biomechanics 2018: Dublin, Ireland, July 8-12, 2018.
44. Capin JJ, Khandha A, Zarzycki R, Arundale AJH, Ziegler ML, Manal K, Buchanan TS, Snyder-Mackler L. Gait Mechanics and Tibiofemoral Loading in Men of the ACL-SPORTS Randomized Control Trial. Oral Presentation. 2018 World Congress on Osteoarthritis (OARSI): Liverpool, England, April 29, 2018.
45. Khandha A, Capin J , Williams JR, Manal K, Snyder-Mackler L, Buchanan TS. Knee biomechanical and biochemical variables early after anterior cruciate ligament reconstruction (ACLR). Poster Presentation. Orthopaedic Research Society (ORS) 2018 Annual Meeting: New Orleans, LA, March 10-13, 2018.
46. Arundale A, Capin J , Zarzycki R, Smith A, Snyder-Mackler L. ACL-SPORTS Program improves functional outcomes with potential implications for reinjury risk. Platform Presentation. Combined Sections Meeting of the American Physical Therapy Association (CSM 2018): New Orleans, LA, February 24, 2018.
47. Capin JJ, Zarzycki R, Arundale AJ, Smith AH, Snyder-Mackler L. Concomitant meniscal status influences patient reported outcomes but not function for two years after ACL reconstruction. Platform Presentation. Combined Sections Meeting of the American Physical Therapy Association (CSM 2018): New Orleans, LA, February 23, 2018.
48. Bonner B, Capin JJ, Khandha A, Manal K, Buchanan TS, Snyder-Mackler L. Patient reported outcomes and frontal plane knee biomechanics improve between 3 and 6 months after ACL reconstruction, but sagittal plane asymmetries do not improve. Platform Presentation. Combined Sections Meeting of the American Physical Therapy Association (CSM 2018): New Orleans, LA, February 22, 2018.



61. Smith AH, Failla M, Capin JJ , Zarzycki R, Snyder-Mackler L. Women who go on to second ACL injury have more limb symmetry earlier after ACLR than those who do not. Podium Presentation. Combined Sections Meeting of the American Physical Therapy Association (CSM 2017): San Antonio, TX, February 15-18, 2017.
62. Zarzycki R, Capin JJ , Failla M, Snyder-Mackler L. Second ACL Injury Rates are Lower in Athletes with Fear of Reinjury and Lack of Confidence. Podium Presentation. Combined Sections Meeting of the American Physical Therapy Association (CSM 2017): San Antonio, TX, February 15-18, 2017.
63. Capin JJ , Khandha A, Zarzycki R, Manal K, Buchanan TS, Snyder-Mackler L. Lower knee flexor muscle forces during gait are associated with second anterior cruciate ligament injury in young female athletes. Thematic Poster Presentation. 40<sup>th</sup> Annual Meeting of the American Society of Biomechanics (ASB): Raleigh, NC, August 4, 2016.
64. Arundale A, Capin J , Snyder-Mackler L. Specialized return to sports training benefits self-reported knee function after ACLR. Platform. 2016 International Conference on Sports Rehabilitation and Traumatology; Football Medicine Strategies Return





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| February 2018 | Combined Sections Meeting of the American Physical Therapy Association (APTA), New Orleans, LA |
| August 2017   | 41 <sup>st</sup> Annual Meeting of the American Society of Biomechanics, Boulder, CO           |
| March 2017    | Orthopaedic Research Society Annual Meeting, San Diego, CA                                     |
| February 2017 | Combined Sections Meeting of the American Physical Therapy Association (APTA), San Antonio, TX |
| December 2016 | Orthopaedic Summit, Las Vegas, NV  |
| August 2016   | 40 <sup>th</sup> Annual Meeting of the American Society of Biomechanics, Raleigh, NC           |
| February 2016 | Combined Sections Meeting of the American Physical Therapy Association (APTA), Anaheim, CA     |
| March 2016    | Running Medicine Conference, University of Virginia, Charlottesville, VA                       |
| August 2015   | 39 <sup>th</sup> Annual Meeting of the American Society of Biomechanics, Columbus, OH          |
| June 2015     | APTA NEXT Conference, Washington, DC   |
| March 2015    | APTA Clinical Instructor Credentialing Course, University of Delaware, Newark, DE              |

#### HONORS AND AWARDS

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| 2021 | 1, + 'LUHFWRU¶V (DUO\ , QGHSHQGHHQFH \$ZDUG '3 UHFL   |
| 2020 | NIH Ruth L. Kirschstein National Research Service Award F32 Postdoctoral Fellowship   |
| 2019 | Outstanding Presentation Award, 9 <sup>th</sup> *UDGX DWH 6WXGHQWV¶ )RUXP IRU and Creative Work, University of Delaware   |
| 2019 | Best Original Research Paper, American Academy of Sports Physical Therapy: Arundale A, Capin JJ, Zarzycki R, Smith A, Snyder-Mackler L. Two Year ACL Reinjury Rate of 2.5%: Outcomes Report of the Men in a Secondary ACL Injury Prevention Program (ACL-SPORTS). International Journal of Sports Physical Therapy. 2018;13(3):422-431.   |
| 2019 | Travel Award, Biomechanics Special Interest Group, Section on Research, American Physical Therapy Association   |
| 2019 | Induction into Phi Kappa Phi Honor Society  |
| 2018 | NIH Ruth L. Kirschstein National Research Service Award F30 Predoctoral Fellowship  |
| 2018 | Promotion of Doctoral Studies (PODS) II Award, Foundation for Physical Therapy Research   |
| 2018 | Dissertation Fellowship Award, University of Delaware   |
| 2018 | Summer Doctoral Award, University of Delaware   |
| 2018 | Award for Excellence in Basic, Clinical, and Translational Science, Journal of Orthopaedic Research: Capin JJ, Khandha A, Zarzycki R, Manal K, Buchanan TS, Snyder-Mackler L. Gait mechanics and second ACL rupture: Implications for delaying return-to-sport. Journal of Orthopaedic Research. 2017;35(9):1894-1901.  |
| 2018 | Excellence in Research Award, Sports Physical Therapy Section of the American Physical Therapy Association: Smith AH, Capin JJ, Zarzycki R, Snyder-Mackler L. Clinical and return to sport outcomes by graft type after completion of a secondary ACL prevention program. Platform Presentation. Combined Sections Meeting of the American Physical Therapy Association (CSM 2018). |
| 2017 | Promotion of Doctoral Studies (PODS) I Award: VCU-Marquette Challenge   |

Award, Foundation for Physical Therapy Research

- 2017 Doctoral Fellowship Award, University of Delaware
- 2016 Best Poster Award, 13<sup>th</sup> Annual Biomechanics Research Symposium, University of Delaware
- 2015-present All-American Triathlete, USA Triathlon
- 2015 Doctorate in Physical Therapy Scholarship Award, University of Delaware
- 2014 Cathy Doetzer Kohlenstein Scholarship, University of Delaware
- 2012 Samuel Baeur Award (awarded to psychology major with the highest grade point average), Christopher Newport University
- 2011 & 2012 The Robert M. Usry Scholar Athlete Award, Christopher Newport University
- 2011 Induction into Psi Chi, The International Honor Society in Psychology
- 2011 Induction into Omicron Delta Kappa, Leadership Honor Society
- 2010-2011 Capital One Academic All-District Team, NCAA College Sports Information Directors of America
- 2009-2012 3-Time USA-South All- \$ F D G H P L F 0 H Q ¶ V % D V N H W E D O O & K U L V W R S University, USA-South Conference
- 2007-2009 2-Time Atlantic Sun All- \$ F D G H P L F 0 H Q ¶ V % D V N H W E S I D , A n t i a t l a n t i c & D P S E H O C Sun Conference