

The University of Nebraska Medical Center

CURRICULUM VITAE Elizabeth A Wellsandt, DPT, MS, PhD

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Education

August 2006 – May 2009	Doctor of Physical Therapy (DPT) Degree University of Nebraska Medical Center Omaha, NE
August 2006 – May 2009	Bachelor of Science (BS) Degree, Medicine University of Nebraska Medical Center Omaha, NE
August 2012 – May 2016	Doctor of Philosophy (PhD), Biomechanics and Movement Science University of Delaware Newark, DE
August 2017 – December 2020	Masters in Science (MS), Clinical Translational Research University of Nebraska Medical Center Omaha, NE

Post-Degree Training

Continuing Education Training

International

April 2017	World Congress, Osteoarthritis Research Society International, Las Vegas, NV
May 2019	World Congress, Osteoarthritis Research Society International, Toronto, Ontario, Canada
May 2021	World Congress, Osteoarthritis Research Society International, Virtual Due to the COVID-19 Pandemic

National

July 2016	New Faculty Development Workshop, American Physical Therapy Association, Education Section, Chicago, IL
February 2017	Combined Sections Meeting, American Physical Therapy Association, San Antonio, TX
November 2017	Annual Meeting, American College of Rheumatology/Association of Rheumatology Health Professionals, San Diego, CA
February 2018	Combined Sections Meeting, American Physical Therapy Association, San Antonio, TX

October 2018 Association, New Orleans, LA
 Annual Meeting, American College of Rheumatology/Association of Health Professionals, Chicago, IL
 January 2019 Combined Sections Meeting, American Physical Therapy Association, Washington, D.C.
 November 2019 Annual Meeting, American College of Rheumatology/Association of Rheumatology Professionals, Atlanta, GA
 February 2020 Combined Sections Meeting, American Physical Therapy Association, Denver, CO
 November 2020 Convergence Meeting, American College of Rheumatology/Association of Rheumatology Professionals Annual, Virtual Due to the COVID-19 Pandemic
 February 2021 Combined Sections Meeting, American Physical Therapy Association, Virtual Due to the COVID-19 Pandemic

Regional

June 2016 Human Movement Variability Conference, University of Nebraska Omaha, Omaha, NE
 October 2016 Fall Meeting, Nebraska Physical Therapy Association, Lincoln, NE
 October 2016 Nebraska Research and Innovation Conference (NRIC): Symposium on Biomechanics, Nebraska EPSCoR; Omaha, NE
 December 2017 Huskers Performance Symposium, University of Nebraska - Lincoln, Lincoln, NE
 May 2018 Human Movement Variability Conference, University of Nebraska Omaha, Omaha, NE
 April 2019 Annual Meeting, Nebraska Physical Therapy Association, Omaha, NE
 April 2019 Locomotor Training Conference, Madonna Rehabilitation Hospital, Lincoln, NE
 April 2019 Hip and Knee: Complex Understanding for Simple Solutions, Erik Meira, Omaha, NE
 August 2020 Great Plains Biomechanics Conference, University of Nebraska Omaha, Omaha, NE
 January 2021 Annual Meeting: Tendinopathy Rehabilitation, Nebraska Physical Therapy Association. Virtual Due to the COVID-19 Pandemic

UNMC

December 2017 Responsible Conduct in Research Training (8 hrs), University of Nebraska Medical Center, Omaha, NE
 October 2018 Annual Scientific Meeting, Great Plains IDeA - CTR, Omaha, NE
 October 2019 Annual Scientific Meeting, Great Plains IDeA - CTR, University of Nebraska Medical Center - Omaha, NE

Academic Appointments

September 2018 - present Courtesy Assistant Professor, Department of Orthopaedic Surgery and Rehabilitation, College of

July 2018 - present	Medicine, University of Nebraska Medical Center, Omaha, NE Director, Clinical Movement Analysis Laboratory, Division of Physical Therapy Education, Department of Health and Rehabilitation Sciences, College of Allied Health Professions, University of Nebraska Medical Center, Omaha, NE
September 2016 - present	Adjunct Assistant Professor, Department of Biomechanics, College of Education, Health and Human Sciences, University of Nebraska at Omaha, Omaha, NE
June 2016 - present	Assistant Professor, Division of Physical Therapy Education, Department of Health and Rehabilitation Sciences, College of Allied Health Professions, University of Nebraska Medical Center, Omaha, NE

Certifications and Licenses

2009 - present	Nebraska Physical Therapy License 2748
2010 - present	Certified Basic Life Support (BLS) - American Heart Association
2015 - present	Orthopedic Certified Specialist, American Board of Physical Therapy Specialties

Grant Support

External Active

Grant Title	Return-To-Sport Testing after ACL Injury: Translation to Clinical Outpatient Care
Funding Agency	Nebraska Foundation for Physical Therapy, George Blanton Grant
Start and End Dates	July 2020 - July 2022
Total Dollars (direct cost)	\$5,000 (\$5,000)
Role	Principal Investigator

Grant Title	Osteoarthritis After ACL Injury: Establishing Cumulative Joint Loading as A Preventative Target (1R21AR075254-01A1)
Funding Agency	Department of Health and Human Services, National Institutes of Health, National Institute of Arthritis and Musculoskeletal and Skin Diseases
Start and End Dates	February 2020 - January 2022
Total Dollars (direct cost)	\$377,786 (\$247,728)
Role	Principal Investigator

Grant Title	Role of Biomarkers in the Osteoarthritis Pathway After Joint Injury
Funding Agency	Rheumatology Research Foundation, Investigator Award

Start and End Dates July 2019 - June 2022
Total Dollars (direct cost) \$375,000 (\$347,408)
Role Principal Investigator

External Completed

Grant Title Factors Associated With Articular Cartilage T2 Relaxation Time in Uninjured Individuals
Funding Agency Nebraska Foundation for Physical Therapy, Scientific Dissemination Award (poster presented at Osteoarthritis Research Society International World Congress, May 2019)
Start and End Dates May 2019 - May 2019
Total Dollars (direct cost) \$1,500 (\$1,500)
Role Principal Investigator

Grant Title Role of Physical Activity in Post-Traumatic Osteoarthritis
Funding Agency Foundation for Physical Therapy Research, New Investigator Fellowship Training Initiative
Start and End Dates September 2017 - August 2019
Total Dollars (direct cost) \$100,000 (\$100,000)
Role Principal Investigator

Grant Title Role of Cumulative Knee Joint Loading in Healthy Articular Cartilage
Funding Agency University of Nebraska at Lincoln, Center for Brain, Biology and Behavior, Seed Grant
Start and End Dates April 2017 - July 2017
Total Dollars (direct cost) \$6,900 (\$6,900)
Role Principal Investigator

Internal Active

Grant Title Optimizing Movement and Physical Activity after Anterior Cruciate Ligament Injury
Funding Agency University of Nebraska, Collaborative Initiative Seed Grant
Start and End Dates July 2021 - June 2023
Total Dollars (direct cost) \$150,000 (\$150,000)
Role Principal Investigator

Grant Title Wearable Sensor System to Monitor Knee Joint Motion
Funding Agency University of Nebraska, Science, Engineering and Medicine Grant
Start and End Dates January 2020 - June 2022
Total Dollars (direct cost) \$100,000 (\$100,000)
Role Co-Principal Investigator (Co-PI: Eric Markvicka, PhD)

Grant Title Supplement: Role of Cumulative Knee Joint Loading in ACL-Injured Articular Cartilage
Funding Agency University of Nebraska Medical Center, Research Support Fund
Start and End Dates July 2018 - July 2024
Total Dollars (direct cost) \$152,005 (\$152,005)
Role Primary Investigator

Internal Completed

Grant Title Supplement: Role of Physical Activity in Post-Traumatic Osteoarthritis
Funding Agency University of Nebraska Medical Center, Vice Chancellor for Research Office, Mentored Scholars Program Pilot Grant
Start and End Dates June 2019 - June 2020
Total Dollars (direct cost) \$25,000 (\$25,000)
Role Principal Investigator

Grant Title Supplement: Role of Physical Activity in Post-Traumatic Osteoarthritis
Funding Agency University of Nebraska Medical Center, College of Allied Health Professions, Pilot Research Grant
Start and End Dates July 2018 - June 2020
Total Dollars (direct cost) \$10,000 (\$10,000)
Role Principal Investigator

Grant Title Purchase of portable gait analysis walkway (Protokinetics Zeno Walkway)
Funding Agency Nebraska Bankers Association Equipment Grants, University of Nebraska Foundation
Start and End Dates April 2018 - April 2019
Total Dollars (direct cost) \$8,319 (\$8,319)
Role Principal Investigator

Grant Title Clinical and Biomechanical Factors in Lower Extremity Osteoarthritis
Funding Agency University of Nebraska, System Science Collaborative Initiative Planning Grant
Start and End Dates April 2017 - March 2018
Total Dollars (direct cost) \$9,825 (\$9,825)
Role Principal Investigator

Student Career Development Awards Completed (Mentor: Wellsandt)

Grant Title Changes in MRI T2 Relaxation Time of Meniscus Following ACL Rupture in Men and Women

Funding Agency University of Nebraska Medical Center, College of Medicine,
Medical Student Summer Research Program
Start and End Dates May 2021 - August 2021
Total Dollars (direct cost) \$3,750 (\$3,750)
Role Mentor (Principal Investigator: Nicole Kent, Doctor of
Medicine Student)

Grant Title Differences in Muscle Strength Recovery Between Patellar,
Quadriceps, and Hamstring Tendon Autografts After ACL
Reconstruction
Funding Agency University of Nebraska Medical Center, College of Medicine,
Medical Student Summer Research Program
Start and End Dates May 2021 - August 2021
Total Dollars (direct cost) \$3,750 (\$3,750)
Role Mentor (Principal Investigator: Shelby Schelkopf, Doctor of
Medicine Student)

Grant Title An MRI Analysis of Knee Joint Effusion As It Correlates to
Clinical Measures After ACL Injury
Funding Agency University of Nebraska Medical Center, College of Medicine,
Medical Student Summer Research Program
Start and End Dates May 2020 - August 2020
Total Dollars (direct cost) \$3,750 (\$3,750)
Role Mentor (Principal Investigator: Jordyn Atwater, Doctor of
Medicine Student)

Grant Title Examining the Influence of Kinesiophobia on Gait
Biomechanics and Daily Physical Activity Levels 4 Months
After Anterior Cruciate Ligament Reconstruction
Funding Agency University of Nebraska Medical Center, College of Medicine,
Medical Student Summer Research Program
Start and End Dates May 2020 - August 2020
Total Dollars (direct cost) \$3,750 (\$3,750)
Role Mentor (Principal Investigator: Garrett Sacco, Doctor of
Medicine Student)

Grant Title The Effect of Adductor Canal Block on Gait: An
Observational Study
Funding Agency University of Nebraska Medical Center, College of Medicine,
Medical Student Summer Research Program
Start and End Dates May 2019 - August 2019
Total Dollars (direct cost) \$3,750 (\$3,750)
Role Mentor (Principal Investigator: David Fu, Doctor of Medicine
Student)

Grant Title Inter-limb T2 Relaxation Time Differences in Healthy

Individuals Related to Physical Activity Levels and Biomechanical Gait
Funding Agency University of Nebraska Medical Center, College of Medicine, Medical Student Summer Research Program
Start and End Dates May 2018 - August 2018
Total Dollars (direct cost) \$3,750 (\$3,750)
Role Mentor (Principal Investigator: Jessica Emory, Doctor of Medicine Student)

Grant Title The Effect of Pre-operative Physical Therapy on Return to Sport Performance and Reinjury Rates Following ACL Reconstruction
Funding Agency University of Nebraska Medical Center, College of Allied Health Professions, Student Research and Education Innovation Grant
Start and End Dates April 2018 - May 2020
Total Dollars (direct cost) \$2,500 (\$2,500)
Role Mentor (Principal Investigator: Regg Strotheide, Doctor of Physical Therapy Student)

Grant Title Movement Asymmetry Detection after ACL Injury
Funding Agency University of Nebraska Medical Center, College of Allied Health Professions, Student Research and Education Innovation Grant
Start and End Dates February 2017 - May 2019
Total Dollars (direct cost) \$2,500 (\$2,500)
Role Mentor (Principal Investigator: Katelyn Hedlund, Doctor of Physical Therapy Student)

Grant Title Accelerometers Used to Measure Gait Asymmetries
Funding Agency University of Nebraska Medical Center, College of Allied Health Professions, Student Research and Education Innovation Grant
Start and End Dates February 2017 - May 2019
Total Dollars (direct cost) \$2,500 (\$2,500)
Role Mentor (Principal Investigator: Emilie Hicks, Doctor of Physical Therapy Student)

Study Sections

2021 - 2024 Rheumatology Research Foundation, Translational/Clinical Study Section, Study Section Member

Patents

Other Appointments and Positions Not Given Above

June 2007 - May 2008 Research Assistant (Mentor: Laura Bilek, PT, PhD),

May 2009 - December 2010	Division Physical Therapy Education, School of Allied Health Professions, College of Medicine, University of Nebraska Medical Center, Omaha, NE Staff Physical Therapist, Valley County Health Systems, Ord, NE
January 2010 - April 2012	Contract Physical Therapist, Aureus Medical, Omaha, NE
May 2012 - August 2012	Physical Therapist, Chugach Physical Therapy, Anchorage, AK
August 2012 - May 2016	Graduate Research Assistant, Biomechanics and Movement Science Program, University of Delaware, Newark, DE

Consulting Positions

Scientific Journal Guest Editor

2020 - 2021 Osteoarthritis and Cartilage (Impact Factor: 4.793), Special Issue on Osteoarthritis Prevention

Grant Reviewer

2017 - present Legacy Grant, Academy of Sports Physical Therapy, American Physical Therapy Association

Professional Society Conference Abstract Reviewer

2016 - present Annual Combined Sections Meeting, Academy of Sports Physical Therapy, American Physical Therapy Association
2017 - present Midwest Student Biomedical Research Forum
2017 - present Human Movement Variability Conference and Great Plains Biomechanics Conference, University of Nebraska at Omaha
2019 - present Convergence Annual Meeting, American College of Rheumatology/Association of Rheumatology Professionals
2021 - present Annual Meeting, Orthopaedic Research Society

Manuscript Reviewer (Peer Reviewed Journals)

2015 - present International Journal of Sports Physical Therapy
2015 - present Journal of Orthopaedic and Sports Physical Therapy
2016 - present The American Journal of Sports Medicine
2016 - present Journal of Applied Biomechanics
2017 - present Journal of Orthopaedic Research
2017 - present Arthritis Care and Research
2018 - present Clinical Biomechanics
2019 - present British Journal of Sports Medicine
2019 - present Gait and Posture
2019 - present The Knee
2019 - present Medicine and Science in Sports and Exercise
2020 - present Journal of Rheumatology

Other

- 2018 - 2018 Participant (Invited), University of Nebraska Visioning Day, University of Nebraska
- 2021 - 2024 Member (Elected), Scientific Advisory Council, Rheumatology Research Foundation

Military Service

Honors and Awards

National

- 2015 Excellence in Research Award, Sports Physical Therapy Section, American Physical Therapy Association, Alexandria, VA
Recognizes the top-rated sports physical therapy abstract submitted to the annual Combined Sections Meeting of the American Physical Therapy Association
- 2017 Emerging Leader Award, American Physical Therapy Association, Alexandria, VA
Recognizes a person who has demonstrated extraordinary service early in his or her physical therapy career
- 2018 Best Research Poster Award (Wellsandt: Co-Author), Cardiovascular/Pulmonary Section, Combined Sections Meeting (CSM), American Physical Therapy Association, Alexandria, VA
- 2019 Investigator Award, Rheumatology Research Foundation, Atlanta, GA
Recognizes and supports junior faculty conducting innovative research in the United States
- 2020-2021 Recipient, Young Investigator Initiative Program, United States Bone and Joint Initiative, Rosemont, IL
Recognizes young investigators in the United States and Canada aiming to increase the pipeline of clinician and basic scientists undertaking musculoskeletal research studies
- 2021 Early Career Investigator Award in Biomechanics Research, Biomechanics Special Interest Group of the Academy of Research, American Physical Therapy Association, Alexandria, VA
Recognizes an emerging expert in biomechanics within the physical therapy profession in the United States

Local

- 2017 Clinical Translational Research - Mentored Scholars Program, University of Nebraska Medical Center, Omaha, NE
Recognizes scientists or health professionals who are at the junior faculty stage to develop into productive and independent clinical and translational researchers
- 2020 Significance in Research Award for Junior Faculty, College of Allied

Health Professions, University of Nebraska Medical Center,
Omaha, NE

*Recognizes junior faculty member who has made significant
research contributions and adding to the knowledge of the
clinical, scientific, and/or educational community.*

2021

New Investigator Award, Vice Chancellor for Research Office,
University of Nebraska Medical Center, Omaha, NE

*Recognizes assistant professors who have received their
first independent national funding in the past fiscal year*

Membership and Offices in Professional Societies

Osteoarthritis Research Society International

2016 - present Member

2019 - present Steering Committee Member (Elected), Rehabilitation Discussion
Group

2019 - present Member (Invited), Osteoarthritis Prevention - Sports, Exercise and
Physical Activity Discussion Group

American Physical Therapy Association

2006 - present Member

2006 - present Member, Nebraska Chapter

2011 - present Member, Academy of Orthopedic Physical Therapy

2013 - present Member, American Academy of Sports Physical Therapy

2013 - present Member, Knee Special Interest Group, American Academy of
Sports Physical Therapy

2015 - present Member, Academy of Physical Therapy Research

2015 - present Member, Biomechanics Special Interest Group, Academy of
Physical Therapy Research

2018-2020 Secretary (Elected)

2016 - 2017 Member, Education Section

Other National Professional Societies

2017 - present Member, American College of Rheumatology/Association of
Rheumatology Professionals

2019-2020 Member (Invited), Annual Meeting Planning
Committee

2020 - present Member, Orthopaedic Research Society

2021 - present Member, American Orthopaedic Society for Sports Medicine

Regional

2016 - 2021 Board Member (Elected) and Secretary, Nebraska Foundation for
Physical Therapy

Committee Assignments

University of Nebraska

2022 - present Member (Invited), Innovation, Development and Engagement Award (IDEA) Selection Committee

University of Nebraska Medical Center

2018 - present College of Allied Health Professions Representative for Intellectual Property Committee, Faculty Senate

Nebraska Medicine

2019 - present Member (Invited), Sports Medicine Steering Committee

2020 - present Member (Invited), Physical Therapy Sports Medicine Committee

College of Allied Health Professions

2017 - present Member, Research Development and Management Committee

2018 - 2018 Member, Search Committee, Director of Doctor of Occupational Therapy Program

2021 - present Member, Search Committee, Assistant Dean for Research for the College of Allied Health Professions

Division of Physical Therapy Education

2016 - 2018 Member, Admissions Committee

2016 - 2018 Member, Scholarships and Awards Committee

2016 - 2020 Member, Curriculum Revision - Human Movement Science Workgroup

2018 - present Chair, Research Committee

2020 - 2020 Member, Search Committee, Faculty Member for Division of Physical Therapy Education

2021 - present Chair, Search Committee, Faculty Member for Division of Physical Therapy Education

Presentations

Invited

International

1. **Wellsandt E**; Snyder-Mackler L, Non-Operative Management of ACL Injuries, International Society of Arthroscopy, Knee Surgery and Orthopaedic Sports Medicine Biennial Congress, Lyon, France, 2015 June 7.

National

1. **Wellsandt E**; Ithurburn M, Science Meets Practice: Achieving Current Symmetry or Going Beyond Symmetry for Return to Sport Following ACL

- Reconstruction, American Physical Therapy Association, Combined Sections Meeting, New Orleans, LA, 2018 Feb 24.
2. **Wellsandt E**, Outcomes after ACL Injury - What Are We Missing? University of North Carolina at Chapel Hill, Chapel Hill, NC, 2018 May 8.
 3. Smith AH; **Wellsandt E**, Shared Decision-Making in the Management of ACL Injuries: Understanding Options, American Physical Therapy Association, Combined Sections Meeting, Denver, CO, 2020 Feb 15.
 4. **Wellsandt E**, Return To Sport After ACL Injury. Forward Movement Analysis & Rehabilitation - Movement Academy, Virtual, 2020 Oct 4.

Regional

1. Snyder-Mackler L; **Wellsandt E**, Dynamic Stability of the ACL-Injured Knee, Omaha, NE, 2014 Oct 10.
2. **Wellsandt E**, The Fading Athlete with an Old Knee: Investigation of Factors After Anterior Cruciate Ligament Injury Related to the Development of Knee Osteoarthritis, University of Nebraska at Omaha, Department of Biomechanics Seminar Series, Omaha, NE, 2016 Sept 16.
3. **Wellsandt E**, Tao MJ, ACL Tears in Elite Athletes: A Modern Evolution, Huskers Performance Symposium, University of Nebraska - Lincoln, Lincoln, NE, 2017 Dec 08.
4. Tao MA; **Wellsandt E**, Basketball Injuries. Moments in Medicine Live, Nebraska Medicine, Omaha, NE, 2019 Feb 11.
5. **Wellsandt E**; Tao MA; Thomsen C; Ohnoutka K, Shared Decision-Making in Physical Therapy, Nebraska Students Special Interest Group, PT PAC Fundraiser, Nebraska Physical Therapy Association, Creighton University, Omaha, NE, 2020 Feb 6.

Community Service/Outreach

October 2019	Volunteer, Farnam Festival, Omaha, NE
August 2020 - present	Youth Soccer Coach, St. Robert Bellarmine, Omaha, NE
October 2021 - present	Youth Basketball Coach, Jewish Community Center, Omaha, NE

Publications

a. Articles Published in Scholar Journals

Peer-Reviewed Publications

1. Hayes B; Kittelson A; Loyd B; **Wellsandt E**; Flug J; Stevens-Lapsley J. Assessing Radiographic Knee Osteoarthritis: An Online Training Tutorial for the Kellgren-Lawrence Grading Scale. *MedEdPORTAL*. 2016 Nov 18;12:10503.
2. **Wellsandt E**, Khandha A, Manal K, Axe MJ, Buchanan TS, Snyder-Mackler L. Predictors of knee joint loading after anterior cruciate ligament

- reconstruction. *J Orthop Res*. 2017 Mar;35(3):651-656.
3. **Wellsandt E**, Gardinier ES, Manal K, Axe MJ, Buchanan TS, Snyder-Mackler L. Decreased Knee Joint Loading Associated With Early Knee Osteoarthritis After Anterior Cruciate Ligament Injury. *Am J Sports Med*. 2016 Jan;44(1):143-51.
 4. Khandha A, Manal K, **Wellsandt E**, Capin J, Snyder-Mackler L, Buchanan TS. Gait mechanics in those with/without medial compartment knee osteoarthritis 5 years after anterior cruciate ligament reconstruction. *J Orthop Res*. 2017 Mar;35(3):625-633.
 5. **Wellsandt E**; Failla MJ; Snyder-Mackler L. Limb Symmetry Indexes Can Overestimate Knee Function After ACL Injury. *J Orthop Sports Phys Ther*. 2017 May;47(5):334-338.
 6. **Wellsandt E**, Zeni JA, Axe MJ, Snyder-Mackler L. Hip joint biomechanics in those with and without post-traumatic knee osteoarthritis after anterior cruciate ligament injury. *Clin Biomech (Bristol, Avon)*. 2017 Dec;50:63-69.
 7. **Wellsandt E**, Golightly Y.. Exercise in the management of knee and hip osteoarthritis. *Curr Opin Rheumatol*. 2018 Mar;30(2):151-159.
 8. Grindem H, **Wellsandt E**, Failla M, Snyder-Mackler L, Risberg MA. Anterior Cruciate Ligament Injury-Who Succeeds Without Reconstructive Surgery? The Delaware-Oslo ACL Cohort Study. *Orthop J Sports Med*. 2018 May 23;6(5):2325967118774255.
 9. **Wellsandt E**, Failla MJ, Axe MJ, Snyder-Mackler L. Does Anterior Cruciate Ligament Reconstruction Improve Functional and Radiographic Outcomes Over Nonoperative Management 5 Years After Injury? *Am J Sports Med*. 2018 Jul;46(9):2103-2112.
 10. **Wellsandt E**, Axe MJ, Snyder-Mackler L. Poor Performance on Single-Legged Hop Tests Associated With Development of Posttraumatic Knee Osteoarthritis After Anterior Cruciate Ligament Injury. *Orthop J Sports Med*. 2018 Nov 26;6(11):2325967118810775.
 11. Khandha A, Manal K, Capin J, **Wellsandt E**, Marmon A, Snyder-Mackler L, Buchanan TS. High muscle co-contraction does not result in high joint forces during gait in anterior cruciate ligament deficient knees. *J Orthop Res*. 2019 Jan;37(1):104-112.
 12. Ouattas A, **Wellsandt E**, Hunt NH, Boese CK, Knarr BA. Comparing single and multi-joint methods to detect knee joint proprioception deficits post primary unilateral total knee arthroplasty. *Clin Biomech (Bristol, Avon)*. 2019 Aug;68:197-204.
 13. **Wellsandt E**, Khandha A, Capin J, Buchanan TS, Snyder-Mackler L. Operative and nonoperative management of anterior cruciate ligament injury: Differences in gait biomechanics at 5 years. *J Orthop Res*. 2020 Dec;38(12):2675-2684.
 14. Kim Y, Lee JM, **Wellsandt E**, Rosen AB. Comparison of shoulder range of motion, strength, and upper quarter dynamic balance between NCAA division I overhead athletes with and without a history of shoulder injury. *Phys Ther Sport*. 2020 Mar;42:53-60.
 15. Holden MA, Button K, Collins NJ, Henrotin Y, Hinman RS, Larsen JB,

Metcalf B, Master H, Skou ST, Thoma LM, **Wellsandt E**, White DK, Bennell K. Guidance for implementing best practice therapeutic exercise for people with knee and hip osteoarthritis: what does the current evidence base tell us? *Arthritis Care Res (Hoboken)*. 2020 Aug 29. doi: 10.1002/acr.24434. Online ahead of print.

16. **Wellsandt E**, Kallman T, Golightly Y, Podsiadlo D, Dudley A, Vas S, Michaud K, Tao M, Sajja B, Manzer M. Knee Joint Unloading and Daily Physical Activity Associate with Cartilage T2 Relaxation Times 1 Month After ACL Injury. *J Orthop Res*. 2021 Mar 29. doi: 10.1002/jor.25034. Online ahead of print.
17. **Wellsandt E**, Emory JR, Golightly YM, Dudley AT, Michaud K, Tao MA, Manzer MN, Sajja BR. Individual and Cumulative Measures of Knee Joint Load Associate with T2 Relaxation of Knee Cartilage in Young, Uninjured Individuals: A Pilot Study. *Knee*. 2021 Aug 6;32:19-29.
18. Rosen AB, **Wellsandt E**, Nicola M, Tao MA. Current Clinical Concepts: Clinical Management of Patellar Tendinopathy. *J Athl Train*. 2021 Oct 8. doi: 10.4085/1062-6050-0049.21. Online ahead of print.

b. Articles Accepted for Publication in Scholarly Journals

Peer-Reviewed Publications

1. Larson D, Vu V, Ness BM, **Wellsandt E**, Morrison S. Rehabilitation after Anterior Cruciate Ligament Reconstruction: A Focus on the Musculoskeletal System. *Int J Sports Phys Ther*.

c. Articles Submitted for Publication in Scholarly Journals

d. Books Published

e. Chapters in Books

1. Snyder-Mackler L, Arundale A, Failla MJ, **Wellsandt E**, Grindem H, Ricci M, Della Villa S, Risberg MA. Controversies in the Technical Aspects of ACL Reconstruction: An Evidence-Based Medicine Approach. Springer; 2017. Chapter 45, Nonoperative Management of ACL Rupture
2. Snyder-Mackler L, Arundale A, Failla MJ, **Wellsandt E**, Grindem H, Ricci M, Della Villa S, Risberg MA. Nonoperative management of ACL rupture. Springer Berlin Heidelberg; 2017. Controversies in the Technical Aspects of ACL Reconstruction; 491-498
3. **Wellsandt E**, Logerstedt D, Snyder-Mackler L. Joint Structure and Function: A Comprehensive Analysis. 6. Philadelphia, PA: F.A. Davis Company; 2019. Chapter 11, The Knee

f. Books or Journal Edited

g. Abstracts and Preliminary Communications (16/50 as first author; 16/50 as senior author)

1. **Wellsandt E**, White K, Snyder-Mackler L. ACL Non-Copers Demonstrate Larger External Knee Adduction Moments One Year after ACLR. American Society of Biomechanics Annual Conference - Poster Presentation. Omaha, NE. 2013 Sep
2. **Wellsandt E**, Logerstedt D, Snyder-Mackler L. The Use of Quadriceps Index as an Indicator of Peak Quadriceps Strength Capacity After ACL Injury - Poster Presentation. American Physical Therapy Association, Combined Sections Meeting; Las Vegas, NV. 2014 Feb
3. **Wellsandt E**, Gardinier ES, Manal K, Axe MJ, Buchanan TS, Snyder-Mackler L. Medial Tibiofemoral Joint Contact Force Unloading Associated with Early Knee Osteoarthritis after ACL Injury and Reconstruction - Poster Presentation. Orthopedic Research Society Annual Conference; New Orleans, LA. 2014 Mar
4. **Wellsandt E**, Gardinier ES, Manal K, Axe MJ, Buchanan TS, Snyder-Mackler L. Association of Joint Moments and Contact Forces with Early Knee Joint Osteoarthritis after ACL Injury and Reconstruction - Poster Presentation. Osteoarthritis Research Society International Annual World Congress; Paris, France. 2014 Apr
5. **Wellsandt E**, Axe MJ, Snyder-Mackler L. Association of Activity and Fear with Joint Space Width After Anterior Cruciate Ligament Reconstruction - Poster Presentation. European Society of Sports Traumatology, Knee Surgery, and Arthroscopy Biennial Congress; Amsterdam, Netherlands. 2014 May
6. **Wellsandt E**, Snyder-Mackler L. Clinical and Performance-Based Measures 6 Months After Anterior Cruciate Ligament Reconstruction Do Not Predict Knee Function at 5 Years - Poster presentation. European Society of Sports Traumatology, Knee Surgery, and Arthroscopy Biennial Congress; Amsterdam, Netherlands. 2014 May
7. **Wellsandt E**, Failla MJ, Snyder-Mackler L. Achieving Symmetry in ACL Return to Sport Testing Does Not Represent Prior Functional Levels - Oral Presentation. American Physical Therapy Association, Combined Sections Meeting; Indianapolis, IN. 2015 Feb
*** *Awarded the Excellence in Research Award from the Sports Physical Therapy Section for the top-rated sports physical therapy abstract*
8. **Wellsandt E**, Khandha A, Manal K, Axe MJ, Buchanan TS, Snyder-Mackler L. Relationship of Biomechanical and EMG Factors to Joint Contact Forces and Early Knee OA after ACL Reconstruction - Oral Presentation. Orthopedic Research Society Annual Conference; Las Vegas, NV. 2015 Mar
9. Khandha A, **Wellsandt E**, Manal K, Marmon AR, Snyder-Mackler L, Buchanan TS. Can Medial Compartment Contact Forces in an ACL Deficient Knee Be Lower Despite Higher Muscle Co-contraction? - Poster Presentation. Orthopedic Research Society Annual Conference; Las Vegas, NV. 2015 Mar
10. Arundale A, **Wellsandt E**, Snyder-Mackler L. How Do Football Players after

- ACLR Compare to Normative Single-Legged Hop Data? - Oral Presentation. International Conference on Sports Rehabilitation and Traumatology, Football Medicine Strategies for Player Care Annual Meeting; London, England. 2015 Apr
11. **Wellsandt E**, Arundale A, Manal K, Buchanan TS, Snyder-Mackler L. Lower Hop Scores Related to Gait Asymmetries After ACL Injury: Identifying Associations Related to the Development of Early Onset Knee OA - Poster Presentation. Osteoarthritis Research Society International Annual World Congress; Seattle, WA. 2015 May
 12. Khandha A, Manal K, **Wellsandt E**, Buchanan TS, Snyder-Mackler L. The Onset of Knee Osteoarthritis After Anterior Cruciate Ligament Surgery Is Associated With Early Unloading Followed By An Extended Period of Normal Loading - Poster Presentation. Osteoarthritis Research Society International Annual World Congress; Seattle, WA. 2015 May
 13. **Wellsandt E**, Manal K, Axe MJ, Buchanan TS, Snyder-Mackler L. Single-Legged Hop Scores Early after ACL Injury Associated with Knee OA 5 Years Later - Poster Presentation. International Society of Arthroscopy, Knee Surgery and Orthopaedic Sports Medicine Biennial Congress; Lyon, France. 2015 Jun
 14. **Wellsandt E**, Risberg MA, Grindem H, Eitzen I, Snyder-Mackler L. Early Predictors of Outcomes Following Non-Operative Management of ACL Injury: The Delaware-Oslo ACL Cohort Study - Oral Presentation. The American Orthopaedic Society of Sports Medicine Annual Meeting; Orlando, FL. 2015 Jul
 15. Capin J, Failla MJ, **Wellsandt E**, Snyder-Mackler L. Does The Addition of Perturbation Training Improve Gait Asymmetries in Athletes After ACLR With Different Mechanisms of Injury? - Poster Presentation. American Society of Biomechanics Annual Conference; Columbus, OH. 2015 Aug
 16. **Wellsandt E**, Axe MJ, Snyder-Mackler L. Single-Legged Hop Tests As A Screening Tool For Risk of Post-Traumatic Osteoarthritis After ACL Injury - Oral Presentation. American Physical Therapy Association, Combined Sections Meeting; Anaheim, CA. 2016 Feb
 17. Dix C, **Wellsandt E**, Snyder-Mackler L. Does Timing of Neuromuscular Training Affect Kinesiophobia, Knee Function, and Return to Sport Outcomes? - Oral Presentation. American Physical Therapy Association, Combined Sections Meeting; Anaheim, CA. 2016 Feb
 18. Khandha A, Manal K, **Wellsandt E**, Capin J, Buchanan TS, Snyder-Mackler L. Peak knee flexion and adduction moments are inversely correlated in subjects with medial compartment osteoarthritis 5 years after anterior cruciate ligament reconstruction - Poster Presentation. Osteoarthritis Research Society International Annual World Congress; Amsterdam, Netherlands. 2016 Mar
 19. Khandha A, Manal K, **Wellsandt E**, Snyder-Mackler L, Buchanan TS. Knee Gait Mechanics and Joint Load Distribution after Anterior Cruciate Ligament Reconstruction (ACLR) for Osteoarthritic (OA) vs. Non-OA Subjects - Poster Presentation. Orthopedic Research Society Annual Meeting; Orlando, FL.

- 2016 Mar
20. **Wellsandt E**, Failla M, Axe MJ, Snyder-Mackler L. Functional, Patient-Report and Radiographic Outcomes 5 Years After Non-Operative and Operative Management of ACL Injury - Oral Presentation. American Physical Therapy Association, Combined Sections Meeting; San Antonio, TX. 2017 Feb
 21. **Wellsandt E**, Axe MJ, Snyder-Mackler L. Radiographic Evidence of Osteoarthritis After Anterior Cruciate Ligament Injury - Poster Presentation. Osteoarthritis Research Society International Annual World Congress; Las Vegas, NV. 2017 Apr
 22. Failla MJ, Zarzycki R, Logerstedt D, **Wellsandt E**, Axe MJ, Snyder-Mackler L. Hop Test Symmetry Scores Early after Rehab Predict Successful 2 Year Outcomes of ACLR - Poster Presentation. The American Orthopaedic Society of Sports Medicine Annual Meeting; Colorado Springs, CO. 2017 Jul
 23. Hageman PA, Yoerger M, **Wellsandt E**. Cardiometabolic Biomarkers, Physical Function and Activity in Women with Arthritis Who Completed a 30-Month Web-Based Weight Loss Intervention - Poster Presentation. American Physical Therapy Association, Combined Sections Meeting; New Orleans, LA. *Cardiopulmonary Physical Therapy Journal*. 2018 Feb, Vol. 29:39
* *Best Research Poster Award, Cardiovascular/Pulmonary Section*
 24. Grindem H, Failla M, **Wellsandt E**, Snyder-Mackler L, Risberg, MA. Anterior Cruciate Ligament Injury: Who Succeeds Without Reconstructive Surgery? - Oral Presentation. European Society of Sports Traumatology, Knee Surgery, and Arthroscopy Annual Congress; Glasgow, Scotland. 2018 May
 25. Kim Y, **Wellsandt E**, Lee JM, Rosen AB. Relationship Between Range of Motion, Strength, Upper Quarter Y-Balance Test and a History of Shoulder Injury among NCAA Division I Overhead Athletes - Poster Presentation. National Athletic Trainers' Association Annual Clinical Symposia; New Orleans, LA. 2018 Jun
 26. Emory JR, Manzer MN, Sajja BR, **Wellsandt E**. Factors Associated With Articular Cartilage T2 Relaxation Time In Uninjured Individuals - Poster Presentation. Osteoarthritis Research Society International World Congress; Toronto, Canada. 2019
 27. Emory JR, Manzer MN, Sajja B, **Wellsandt E**. Factors Associated with Articular Cartilage T2 Relaxation Time in Uninjured Controls - Oral Presentation. Midwest Student Biomedical Research Forum; Omaha, NE. 2019 Feb
* *Third Place, Medical Student Oral Presentation*
 28. Hedlund KN, Hicks EJ, **Wellsandt E**. Relationship Between Squat Biomechanics and Functional Outcomes After Anterior Cruciate Ligament Reconstruction - Poster Presentation. Midwest Student Biomedical Research Forum; Omaha, NE. 2019 Feb
 29. Hicks EJ, Hedlund KN, Siu K, **Wellsandt E**. Gait Asymmetry Detection After Anterior Cruciate Ligament Reconstruction Using Accelerometers - Poster Presentation. Midwest Student Biomedical Research Forum; Omaha, NE. 2019 Feb
 30. Munde S, Manzer MN, **Wellsandt E**, Emory JR, Sajja BR. Machine Learning-

- based Human Knee Cartilage Segmentation on MRI - Poster Presentation. ISMRM 2019; Montreal, Canada. 2019 May
31. Failla MJ, Grindem H, **Wellsandt E**, Engebretsen L, Axe MJ, Risberg MA, Snyder-Mackler L. Preoperative Predictors of 2-Year Success in Athletes after Anterior Cruciate Ligament Reconstruction - Poster Presentation. 12th Biennial ISAKOS Congress; Cancun, Mexico. 2019 May
 32. **Wellsandt E**, Golightly YM, Jorgensen A, Tao MA. Preliminary Data of the Associations Between Gait Patterns With Physical Function and Physical Activity One Month After Anterior Cruciate Ligament Injury - Poster Presentation. Osteoarthritis Research Society International World Congress; Virtual Due to COVID-19; Vienna, Austria. 2020 May
 33. Jorgensen, Barber R, Tao MA, **Wellsandt E**. Quadriceps Performance is Associated with Knee Mechanics During Squatting 6 Months Post-Anterior Cruciate Ligament Reconstruction: A Preliminary Analysis - Poster Presentation. UNMC College of Allied Health Professions Evidence-Based Forum; Virtual Due to COVID-19; 2020 May
 34. Jorgensen A, Barber R, Tao MA, **Wellsandt E**. Quadriceps Performance Is Associated With Knee Mechanics During Squatting 6 Months Post-Anterior Cruciate Ligament Reconstruction: A Preliminary Analysis - Oral Presentation. Human Movement Variability Conference and Great Plains Biomechanics Conference; Virtual Due to COVID-19; Omaha, NE. 2020 Aug
 35. Thoma LM, **Wellsandt E**, Wipfler K, Michaud K. Baseline Factors Not Associated with Rehabilitation Dose Over Six Months Among Adults with RA - Poster Presentation. American College of Rheumatology Convergence; Virtual Due to COVID-19; 2020 Nov
 36. Ito N, Arhos EK, Capin JJ, **Wellsandt E**, Buchanan TS, Snyder-Mackler L. Preoperative Asymmetry in Quadriceps Activity to Knee Flexion Moment Latency During Gait is Associated with Radiographic Osteoarthritis Six Years after ACL Reconstruction - Oral Presentation. Arthritis Foundation - Osteoarthritis Clinical Studies (OACS) Conference; Virtual Due to COVID-19; 2020 Dec
 37. Jorgensen A, Barber R, Post AL, Sacco G, Tao MA, **Wellsandt E**. Kinesiophobia Is Associated with Pre-Operative Squat Symmetry In Patients with Anterior Cruciate Ligament Rupture - Poster Presentation. American Physical Therapy Association, Combined Sections Meeting; Virtual Due to COVID-19; J Orthop Sports Phys Ther. 2021 Feb, Vol. 51
 38. Lewis J, Sacco G, Post AL, Tao MA, **Wellsandt E**. Physical Activity Levels Before and Early After Anterior Cruciate Ligament Reconstruction - Poster Presentation. American Physical Therapy Association, Combined Sections Meeting; Virtual Due to COVID-19; J Orthop Sports Phys Ther. 2021 Feb, Vol. 51
* *First Place, Medical Student Oral Presentation*
 39. Strotheide RW, Podsiadlo DF, Conlin A, Murray P, Sanny W, Post AL, **Wellsandt E**. Short Bouts of Pre-Operative Physical Therapy Do Not Improve Knee Function after ACL Reconstruction. American Physical Therapy Association - Poster Presentation. American Physical Therapy Association,

- Combined Sections Meeting; Virtual Due to COVID-19; J Orthop Sports Phys Ther. 2021 Feb, Vol. 51
40. Thoma L, **Wellsandt E**, Wipfler K, Michaud K. Association of Rehabilitation Dose with Change In Clinical Outcomes Among Adults with Rheumatoid Arthritis - Poster Presentation. American Physical Therapy Association, Combined Sections Meeting; Virtual Due to COVID-19; 2021 Feb
 41. Jorgensen A, McManigal ML, Post AL, Allen MF, Tao MA, **Wellsandt E**. Minimal Detectable Change of Spatiotemporal Variables During Walking and Running on an Instrumented Pressure Walkway in Young, Active Individuals - Oral Presentation. Midwest Student Biomedical Research Forum; Virtual Due to COVID-19; 2021 Feb
 42. Kallman T, Podsiadlo DF, Post AL, Tao MA, Sajja BR, Manzer MN, **Wellsandt E**. The Association of Patient Characteristics and Physical Activity on Knee Articular Cartilage Structure After ACL Injury - Oral Presentation. Midwest Student Biomedical Research Forum; Virtual Due to COVID-19; 2021 Feb
 43. McManigal ML, Jorgensen A, Allen MF, Barber R, Post AL, Markvicka E, Tao MA, **Wellsandt E**. Validation of Relative Pressure from Pressure Walkway to Force Plates in Young, Active Individuals - Oral Presentation. Midwest Student Biomedical Research Forum; Virtual Due to COVID-19; 2021 Feb
 44. Post AL, Sanny W, Murray P, Conlin A, Jorgensen A, Sacco G, Podsiadlo DF, **Wellsandt E**. Psychological Factors Strongly Associate with Self-Reported Knee Function 2-8 Years after Anterior Cruciate Ligament Reconstruction - Oral Presentation. Midwest Student Biomedical Research Forum; Virtual Due to COVID-19; 2021 Feb
** First Place, Medical Student Oral Presentation*
 45. Sacco G, Jorgensen A, Post AL, Tao MA, **Wellsandt E**. Association Between Kinesiophobia and Daily Step Count Before and 4 Months After Anterior Cruciate Ligament Reconstruction - Oral Presentation. Midwest Student Biomedical Research Forum; Virtual Due to COVID-19; 2021 Feb
 46. Ito N, Arhos EK, Capin JJ, **Wellsandt EA**, Buchanan TS, Snyder-Mackler L. Athletes Who Developed Radiographic Knee Osteoarthritis 6-Years After ACL Reconstruction Walked with Asymmetrical Quadriceps Latency Before Surgery - Poster Presentation. Orthopaedic Research Society Annual Meeting; Virtual Due to COVID-19; 2021 Feb
 47. Kallman T, Podsiadlo DF, Post AL, Tao MA, Sajja BR, Manzer MN, **Wellsandt E**. The Effect of Patient Demographics and Physical Activity on Knee Articular Cartilage Structure After ACL Injury - Poster Presentation. Orthopaedic Research Society Annual Meeting; Virtual Due to COVID-19; 2021 Feb
 48. **Wellsandt E**; Kallman T; Golightly Y; Podsiadlo DF; Dudley A; Vas S; Michaud K; Tao MA; Sajja BR; Manzer MN. Knee Joint Unloading and Daily Physical Activity Associate with Cartilage T2 Relaxation Times One Month After ACL Injury. Osteoarthritis Research Society International World Congress - Oral Presentation; Virtual Due to COVID-19; 2021 Apr
 49. Jorgensen A; Barber R; Post A; Werner D; Tao M; **Wellsandt E**. Association

of Pre-Operative Squat Symmetry and Post-Operative Knee Function in Patients After Anterior Cruciate Ligament Reconstruction. Great Plains Biomechanics Conference - Poster Presentation; Virtual Due to COVID-19; 2021 May.

**Outstanding Poster Award*

50. McManigal M; **Wellsandt E**; Markvicka E. Mobile, Biosensor Technology for Measuring Joint-Level Human Motion. Great Plains Biomechanics Conference - Poster Presentation; Virtual Due to COVID-19; 2021 May.

h. Published Audiovisual or Computer-Based Educational Materials and Computer Software

i. Published Continuing Education Materials, On-Line Courses

1. Nawasreh Z; **Wellsandt E**; Logerstedt D. Current Concepts in ACL Injury, Surgery, and Rehabilitation. GSC Homes Study Courses, S.C. Publishing. 2014

Teaching Activities

a. Lectures Given in Team-Taught Courses

UNMC

PHYT 505, Human Movement 2

Lead Instructor (Movement Analysis Module); 14 lectures (28 contact hours); 5 labs (9 contact hours), Spring 2020 - present

PHYT 606, Musculoskeletal Physical Therapy 3

Lead Instructor (Knee Module); 3 lectures (6 contact hours); 3 labs (6 contact hours), Spring 2020 - present

PHYT 505, Musculoskeletal Physical Therapy I

Lead Instructor (Biomechanics Module); 9 lectures (18 contact hours); 2 labs (4 contact hours), Spring 2017 - Spring 2019

PHYT 605, Musculoskeletal Physical Therapy II: Upper Quarter

Lab Instructor, 6 labs (14 contact hours), Fall 2016 - Fall 2017

PHYT 606, Musculoskeletal Physical Therapy III: Lower Quarter

Lead Instructor (Knee Module); 2 lectures (4 contact hours); 3 labs (6 contact hours); Lab Instructor (non-knee labs); 8 labs (16 contact hours), Spring 2017 - Spring 2019

PHYT 614, PT Management of Individuals with Chronic Health Conditions

Lead Instructor (Arthritis Lecture); 1 lecture (2 contact hours), Spring 2017 - Spring 2019

PHYT 740, Critical Inquiry II

Assistant Instructor During Lectures; 11 lectures (23 contact hours), Spring 2018 - Spring 2020

UNO

BMCH 1100, Ethics of Scientific Research

Guest Lecture (2 contact hours): Ethics in Physical Therapy, Fall 2018 - present

HPER 8850, Exercise for Special Populations

Guest Lecture (2 contact hours): Post-Traumatic Osteoarthritis after ACL Injuries, Spring 2016 - present

BMCH 1000, Introduction to Biomechanics

Guest Lecture (2 contact hours): Biomechanics in Physical Therapy, Fall 2018 - present

BMCH 4640, Orthopedic Biomechanics

Guest Lecture (2 contact hours): Biomechanics in ACL Injury, Fall 2018 - present

Other

UNMC Summer Physical Therapy Education for Chinese Students (SPECS) Program

Instructor; Biomechanics Research in Physical Therapy, Summer 2018 - present

b. Courses Coordinated or Supervised

PHYT 742, Special Topics: Research Elective

University of Nebraska Medical Center, Course Coordinator; 15 contact hours, Summer 2021 - present

PHYT 740, Critical Inquiry II

University of Nebraska Medical Center, Lead Instructor; 21 lectures (45 contact hours), Spring 2017

c. Courses Taught

PHYT 742, Special Topics: Research Elective

University of Nebraska Medical Center, Course Instructor; 15 contact hours, Summer 2021 - present

PHYT 740, Critical Inquiry II

University of Nebraska Medical Center, Lead Instructor; 21 lectures (45 contact hours), Spring 2017

d. Graduate and Research Student Instruction

UNMC Graduate Student Committee Chair

1. PhD Dissertation - Alyx Jorgensen

Medical Sciences Interdepartmental Area – Patient-Oriented Research,

- 2019 - present
2. Masters Thesis - Matthew McManigal
Medical Sciences Interdepartmental Area – Patient-Oriented Research, 2020 - present
 3. PhD Dissertation - David Werner
Medical Sciences Interdepartmental Area – Patient-Oriented Research, 2021 - present
 4. PhD Dissertation (Co-Chair) – Morgan Busboom
Medical Sciences Interdepartmental Area – Patient-Oriented Research, 2021 - present

UNMC Graduate Student Committee Member

1. PhD Dissertation - Nicholas Hein
Biostatistics, 2018 - 2019
2. Masters Thesis - Muchen Ren
Medical Sciences Interdepartmental Area – Patient-Oriented Research, 2019 - present

Non-UNMC Graduate Student Committee Member

1. Masters Thesis - Youngwook Kim
University of Nebraska Omaha, Athletic Training, 2016 - 2017
2. Masters Thesis - Abderrahman Ouattas
University of Nebraska Omaha, Exercise Science, 2017 - 2018
3. Masters Thesis - Boyoung Park
University of Nebraska Omaha, Athletic Training, 2017 - 2018
4. PhD Dissertation - Jessica Johnson
University of Delaware, Biomechanics and Movement Science, 2019 - 2020
5. PhD Dissertation - Namwoong Kim
University of Nebraska Omaha, Exercises Science – Biomechanics, 2020 - 2021
6. PhD Dissertation - Todd Leutzinger
University of Nebraska Omaha, Exercises Science – Biomechanics, 2020 - 2021

UNMC Sports Medicine Research Fellowship Mentor

1. Austin Post, 2020-2021
2. Jaycee Schettler, 2021-2022

UNMC Health Professions Student Research Mentor

1. Doctor of Physical Therapy Student - Emilie Hicks
Project Title: Accelerometers Used to Measure Gait Asymmetries, 2017 -

2019

2. Doctor of Physical Therapy Student - Katelyn Hedlund
Project Title: Movement Asymmetry Detection after ACL Injury, 2017 - 2019
3. Doctor of Medicine Student - Jessica Emory
Project Title: Inter-limb T2 Relaxation Time Differences in Healthy Individuals Related to Physical Activity Levels and Biomechanical Gait, 2018
4. Doctor of Physical Therapy Student - Regg Strotheide
Project Title: The Effect of Pre-operative Physical Therapy on Return to Sport Performance and Reinjury Rates Following ACL Reconstruction, 2018 - 2020
5. Doctor of Medicine Student - David Fu
Project Title: Gait Before and After Adductor Canal Block, 2019
6. Doctor of Medicine Student - Garrett Sacco
Project Title: Examining the Influence of Kinesiophobia on Gait Biomechanics and Daily Physical Activity Levels 4 Months After Anterior Cruciate Ligament Reconstruction, 2020
7. Doctor of Medicine Student - Jordyn Atwater
Project Title: An MRI Analysis of Knee Joint Effusion As It Correlates to Clinical Measures After ACL Injury, 2020
8. Doctor of Medicine Student - Nicole Kent
Project Title: Changes in MRI T2 Relaxation Time of Meniscus Following ACL Rupture in Men and Women, 2021
9. Doctor of Medicine Student - Shelby Schelkopf
Project Title: Differences in Muscle Strength Recovery Between Patellar, Quadriceps, and Hamstring Tendon Autografts After ACL Reconstruction, 2021

Non-UNMC Student Research Mentor

1. Bachelors of Exercise Science Student - Michael Allen
Project Title: Quadriceps Rate of Torque Development and Bilateral Squat Asymmetries After Passing Return-to-Sport Testing Following Anterior Cruciate Ligament Reconstruction, University of Nebraska Omaha, 2020
2. Bachelors of Exercise Science Student - James Lewis
Project Title: Quadriceps Rate of Torque Development and Bilateral Squat Asymmetries After Passing Return-to-Sport Testing Following Anterior Cruciate Ligament Reconstruction, University of Nebraska Omaha, 2020
3. Masters of Athletic Training Student - Vanessa Derner
Project Title: Quadriceps Rate of Torque Development and Bilateral Squat Asymmetries After Passing Return-to-Sport Testing Following Anterior Cruciate Ligament Reconstruction, University of Nebraska Omaha, 2020 – 2021
4. Bachelors of Biology Student – Ashley Marsh
Project Title: Quadriceps Strength and Confidence in Daily Activities at 4

and 6 Months after ACL Reconstruction, Doane University, UNMC INBRE Program, 2021

e. Resident Training Instruction

f. Continuing Education Lectures and Courses

1. **Wellsandt E.** Return to Sport Rehabilitation and Testing After Knee Injury. University of Kansas Medical Center: Bridge the Gap Between Clinical Practice Patterns and Evidence-Based Treatments; 2018 Nov 13. Belleville, KS
2. Jones KJ; Sigward S; Grooms D; Ithurburn M; Paterno M; **Wellsandt E.** Osteoarthritis: A long-term consequence of ACL injury. ACL Study Day; 2019 Aug 3. University of California at Los Angeles, Los Angeles, CA
3. Paterno M; **Wellsandt E.** Ithurburn M; LaPlante S; Sigward S; Grooms D; Eibensteiner J; Loveland D; Angeli J. Osteoarthritis: A Long-Term Consequence of ACL Injury; Restoring Quadriceps Strength After ACL Injury. ACL Study Day; 2021 May. Virtual Due to the COVID-19 Pandemic.