

CURRICULUM VITAE

Ryan Mizner, PT, PhD

School of Physical Therapy & Rehabilitation Science
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 University of Montana
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Education

2000-2005	University of Delaware	Ph.D.	Biomechanics and Movement Science
1998-2000	University of Delaware	M.P.T.	Physical Therapy
1993-1998	Montana State University	B.S.	Exercise Science – Biomechanics

Licensure Information

Montana	# PTP-PT-LIC-2316
Washington (previous)	# PT00010332
Delaware (previous)	# J10001486

Employment and Positions Held:

ACADEMIC: Full Time Tenured Professor
 Rank: Professor
 University of Montana
 School of Physical Therapy and Rehabilitation Science
 Duration: August 2019 - current

Program Director
 University of Montana
 School of Physical Therapy and Rehabilitation Science
 Duration: Aug 20, 2024 – Aug 7, 2026
 July 2014 - August 2015

Program Co-Chair
 University of Montana
 School of Physical Therapy and Rehabilitation Science
 Duration: Aug 20, 2024 – Aug 7, 2026
 May 11, 2020 – July 31, 2021

Program Chair
 Rank: Associate Professor
 University of Montana
 School of Physical Therapy and Rehabilitation Science
 Duration: July 2014 – Aug 2015

Full Time Tenured Professor
 Rank: Associate
 University of Montana
 School of Physical Therapy and Rehabilitation Science
 Duration: July 2014 – July 2019

Full Time Tenure-track Professor
 Rank: Assistant
 University of Montana

School of Physical Therapy and Rehabilitation Science
Duration: August 2009 - 2014

Full Time Tenure-track Professor
Rank: Assistant
Eastern Washington University
Department of Physical Therapy
Duration: September 2004 – July 2009

Research Assistantship
Funding: NIH T32 Training Grant (Binder-Macleod PI), NIH R01 Sponsored Clinical Trial (Snyder-Mackler PI), Foundation for Physical Therapy Scholarships
University of Delaware
Department of Physical Therapy
Newark, DE 19716
Duration: July 2000 – August 2004

Teaching Assistantships
Medical Science II (Orthopaedics) PHYT 802: 2001-04
Musculoskeletal Evaluation & Treatment PHYT 608: 2001-03
Physical Agents PHYT 603 2000-03
University of Delaware
Department of Physical Therapy
Newark, DE 19716

CLINICAL

Per Diem Staff Physical Therapist
Deer Lodge Medical Center
1100 Hollenback Lane
Deer Lodge, MT 59722
Duration: Summers of 2011-2021

Per Diem Staff Physical Therapist
University of Montana
Nora Staael Evert Physical Therapy Clinic
Missoula, MT 59812
Duration: June 2010 - 2011

Supplemental Staff Physical Therapist
Providence Health Care System
Outpatient and Sub-acute Rehab Services
Deer Park and Northpoint Offices, Spokane WA
Duration: Summer and Holiday coverage 2007-2009

Supplemental Staff Physical Therapist
Apex Physical Therapy
Outpatient and Sports Rehabilitation
Spokane and Cheney, WA
Duration: Summer of '07

Per Diem Staff Physical Therapist
University of Delaware Physical Therapy Clinic
Newark, DE 19716
Duration: June 2001-August 2004

Staff Physical Therapist and Clinical Instructor
University of Delaware Physical Therapy Clinic
Newark, DE 19716
Duration: August 2000-May 2001

Honors and Awards:

- 2018 Selected for Clinician's Reception at ACSM Annual Meeting
Top 11 clinical research posters are highlighted in this special presentation session
- 2017 Best Poster Award
Gait and Clinical Movement Analysis Society Annual Conference
- 2016-2017 Faculty Merit Award
University of Montana, Missoula
- 2016 Best Annual Presentation Award, Neck Session
American Academy of Orthopaedic Manual Physical Therapists (AAOMPT)
- 2016 Nominated for Best Poster award for the Academy of Orthopaedic Physical Therapy
Combined Sections Meeting of the American Physical Therapy Association
- 2015 Nominated for Best Poster award for the Academy of Orthopaedic Physical Therapy
Combined Sections Meeting of the American Physical Therapy Association
- 2012-2013 Faculty Merit Award
University of Montana, Missoula
- 2009 Margaret L. Moore Outstanding New Academic Faculty Award
American Physical Therapy Association (APTA)
- 2009 Outstanding Faculty Merit Award for Scholarship
Eastern Washington University
- 2007 Quality Service Initiative - Excellence in Quality Service Award
Member Planning Committee for the Research and Creative Works Symposium
Eastern Washington University
- 2005 Finalist for New Investigator Recognition Award
Orthopaedic Research Society (ORS)
One of Top 40 abstracts from >500 are invited to present at National Meeting as Finalists
- 2005 Invited Participant of the Young Investigator Initiative
US Bone & Joint Decade: (Top 30% of applications)
- 2004 National Institutes of Health – NICHD trainee: supported with a T32 award
- 2002 American Physical Therapy Association: Promotion of Doctoral Studies I Scholarship
- 2001 American Physical Therapy Association: Mary McMillan Doctoral Scholarship

GRANT ACTIVITY

SUBMITTED AND UNDER REVIEW

None currently

ACTIVE

None Currently

PREVIOUSLY FUNDED

Unrestricted Research Grant

Title: Clinical implications of knee load avoidant behavior during resistance exercise after ACL reconstruction

Role: Principal Investigator

Awarding Institution: Academy for Orthopaedic Physical Therapy of the APTA

Award Dates: May 1, 2022 – April 30, 2024

Funds: \$40,000 direct funds

Major Goals: We aim to produce foundational knowledge as to how patients' load avoidant behavior subverts the benefits of progressive exercise used to address post ACL-R impairments. Further, we will identify predictors detrimental knee load avoidant behaviors to inform clinical care and drive future intervention studies.

Pilot Grant Award

Title: Developing Tech-Informed Neuromuscular Training (TNT) for Knee Rehabilitation

Role: Mizner, Ryan L.; PD of the parent award (Francisco Sy)

Project Number or Award Title: Single Investigator Pilot Projects Grants from MW CTR-IN

Source of Support: subaward from Project #1U54GM104944 from NIGMS

Award Start and End Date: 10/27/2022 - 02/15/2024

Funds: \$66,000 with \$60,000 direct and \$6,000 indirect costs

Major goals: The proposal focuses on two major aims:

Aim 1: To validate our instrumented insoles to provide a clinically valuable surrogate of lab-standard quadriceps loading = (interlimb symmetry & magnitude knee extensor torque) during resisted squats.

Aim 2: To determine the efficacy of an insole-informed novel cueing strategy to correct quadriceps unloading during exercise as compared to natural movement patterns and standard clinical cues.

Pilot Grant Program Award

Title: A mixed-methods analysis of rurality and guideline concordant care in knee osteoarthritis

Role: Co-Investigator (PI: Caitlin Miller Zondlo)

Awarding Institution: Subaward of the Center for Population Health Research (CPHR), a NIH-funded Center of Biomedical Research Excellence (CoBRE)

Award Dates: March 2022 – Sept 2023

Funds: \$46,083 direct funds

Major goals: The specific aims of this mixed-method study are: 1) Examine the association of Rural-urban commuting codes (RUCA) and guideline concordant care in Medicare beneficiaries living in Montana with knee osteoarthritis in the 2-years prior to total knee arthroplasty (TKA). 2) Determine patient-related (beliefs/attitudes) and health system-related factors (provider type, access to care) that impact the care pathway for patients with knee OA from rural areas versus non-rural areas.

Translational Scholars Research Program

Title: Novel Training Strategies to Preserve Articular Cartilage Health after ACL Reconstruction

Role: Principal Investigator

Awarding Institution: The Institute of Translational Health Sciences (One of Hubs for the National Institutes of Health's Clinical and Translational Science Awards (CTSA) Program at UWashington)

Award Dates: March 2018 – February 2019

Funds: \$10,000 direct funds

The Institute of Translational Health Sciences has a Translational Research Scholars Program that is focused on developing new investigators who will be successful in submitting R-level research projects to the NIH related to translational and clinical research. The program provides a small fund for a modest pilot testing as well as resources to connect with my outside mentor and to travel for mentorship/training

activities in Seattle at the University of Washington.

CTR-IN Mini-Grant Program

Role: Co-Principal Investigator (Mays RJ – PI)

Awarding Institution: Sub-award from the University of New Mexico, Mountain West CTR-IN National Institutes of Health (NIGMS) (PI: Langer R with UNM)

Title: Community based walking exercise enhanced by orthoses to improve walking ability.

Dates: Dec 1 2015-June 30 2016.

Funds: \$12, 657

Aim: Application for funds to provide additional subjects for current open-label clinical trial of using carbon fiber ankle foot orthoses to enhance walking performance in patients with peripheral artery disease.

Cardon Rehabilitation Grant

Role: Co-Investigator (3% effort) (PI: Kinney AE)

Awarding Institution: American Academy of Orthopaedic Manual Physical Therapists (AAOMPT)

Title: The Relationship among Cervical Joint Mobility, Postural Sway and Cervical Spine Kinesthetic Awareness in Individuals Post-Concussion

Dates: 10/01/2014-10/1/2016

Funds: \$3,500

Aim: The purpose of the proposed study is to examine the relationship of cervical spine joint mobility, cervical kinesthetic sense and postural sway in individuals who report being asymptomatic based on neurocognitive signs and symptoms post-concussion.

Pilot Project Grant from the parent award: 1U54GM104944-01

Role: Co-Principal Investigator (10% effort) (Co-PI: Mays RJ)

Awarding Institution: Sub-award from the University of New Mexico

National Institutes of Health (NIGMS) (PI: Langer R with UNM)

Title: Community-based walking exercise enhanced by orthoses to improve walking ability in patients with peripheral artery disease

Dates: 07/01/2014 - 6/30/2015

Aim: We will test the hypotheses that using carbon fiber ankle foot orthosis (AFO) with patients who have intermittent claudication from peripheral artery disease (PAD) will reduce barriers and improve the efficacy of community walking exercise.

Funds: \$82,317 (\$74,997 direct costs)

New Investigator Grant

Role: Co-PI (10% effort) (PI: Elias ARC)

Awarding Institution: Orthopaedic Section of the American Physical Therapy Association

Title: A clinical trial to improve motor learning in plyometric training post-ACLR via novel body-weight support

Award Dates: 5/15/2014 – 5/14/2015

Aim: To determine if high volume jump training with reduced loading intensity will preferentially enhance motor learning for improved load attenuation compared to standard jump training.

Funds: \$15,000

Miami-Marquette Challenge Research Grant

Role: Principle Investigator (25% effort)

Awarding Institution: Foundation for Physical Therapy

Award Dates: 1/1/2014 – 12/31/2015

Title: A Novel Unweighting Technology to Address Psychological Impairments Limiting Outcomes after ACL Reconstruction

Aim: To determine if 8 weeks of training with the bodyweight reduction instrument to deliver graded exercise (BRIDGE) will reduce psychological impairments and restore knee loading performance in the ACLR knee more than standard jump training. Our long-term goal is to develop an effective treatment paradigm that will address the psychological factors that limit common retraining efforts designed to

restore the force absorption capacity of the ACL reconstructed knee.
Funds: \$40,000

U54 OH008307

Role: Co-Investigator 20% effort Academic Year and 33% summer (Anton D, PI)
Awarding Institution: DHHS/NIOSH – The Center for Construction Research and Training (CPWR)
Award Date: 07/01/2006 - 06/30/2009 (no cost extension to 2010)
Title: Ergonomic Controls for the Masonry Industry
The purpose of the investigation is to identify the current use of ergonomic controls, evaluate promising controls for effectiveness, and disseminate knowledge of these controls throughout the industry.
Funds: \$600,000

State of Washington: Work Study Community Service Project Award

Role: Principle Investigator (10% effort) Award Date: 07/01/2006 - 06/30/2007
Awarding Institution: State of Washington RENEWED 07/01/2007-6/30/2008
Title: Science Ambassador Program: An Evidence-based Practice Campaign
Physical therapy students will be mentored in the processes of research, critical inquiry and effective education through research internships in the PI's laboratory. These student science ambassadors will then share their training in critical review of scientific literature and clinical research with local clinicians through a series of community education seminars. The ambassadors produced scientific presentations and publications related to with knee ligament injury prevention and functional performance of patients total knee arthroplasty.
Funds: \$57,605

Faculty Grant for Research and Creative Work

Awarding Institution: EWU, Award date: 07/01/2006 – 06/30/2007
Title: Ambulatory Activity and Functional Limitations in Advance Knee Osteoarthritis
Role: Principal Investigator (Summer effort)
The purpose of the proposed investigation is to provide pilot data for an investigation of the influence of the combined effect of physical activity and movement patterns on muscular impairments and function in a cohort of people with advance knee osteoarthritis.
Funds: \$9,940

Faculty Grant for Research and Creative Work

Awarding Institution: EWU, Award date: 07/01/2005 – 06/30/2006
Title: Efficacy of Specific Exercise Prescription in Outpatient Rehabilitation after Total Knee Replacement.
Role: Principal Investigator (summer effort)
The purpose of the proposed investigation is to determine which of four common types of exercises used in outpatient physical therapy evoke the greatest quadriceps muscle activity. Electromyography will be used to quantify the level of quadriceps muscle activity during four different exercises commonly used in P.T.
Funds: \$10,000

Academic Affairs Equipment Award

Awarding Institution: Eastern Washington University Award date: 03/01/2005
Title: Proposal for a Multicamera Motion Capture System
Role: Principal Investigator
The purpose of this award was to support the research and classroom instruction objectives of faculty within the physical therapy department. The funds were for a high resolution multi-camera motion capture system that was integrated with existing electromyography and force plate equipment to obtain objective quantitative data regarding the movement patterns of various patient populations.
Funds: \$49,345

Promotion of Doctoral Studies Scholarship (PODS I)

Awarding Institution: Foundation for Physical Therapy Award Dates: 9/2002 - 8/2003

Role: Principal Investigator

The purpose of this award was to provide salary support for the second year of doctoral training. The title of the dissertation project was “Quadriceps Femoris Weakness and Functional Outcome in Individuals with End-Stage Knee Osteoarthritis”. The dissertation was completed in 2005.

Funds: \$7,500

Mary McMillan Scholarship

Awarding Institution: Foundation for Physical Therapy Award Dates: 9/2001 - 8/2002

Role: Principal Investigator

The purpose of this award was to provide salary support for the first year of doctoral training. The title of the dissertation project was “Quadriceps Femoris Weakness and Functional Outcome in Individuals with End-Stage Knee Osteoarthritis”. The dissertation was completed in 2005.

Funds: \$5,000

NON-FUNDED APPLICATIONS

Montana INBRE 2023-2024 Rapid Turn-Around Infrastructure and Equipment

Title: Modernizing an Active and Productive Clinical Biomechanics Laboratory

Role: Principal Investigator (PI) (CoI-Rich Willy)

Awarding Institution: Montana INBRE

Award Dates: Feb 01, 2024 – April 30, 2024

Funds: \$49,840

Major Goal: We are submitting a request to replace research infrastructure that was over 15 years old and is no longer supported by vendor to modernize the Movement Science Laboratory in the School of Physical Therapy.

The Center on Health Services Training and Research (CoHSTAR)

PI: Ryan Mizner

Application Title: Development of a Pragmatic Knee Kinetic Assessment Scheme to Reshape ACL Rehab

Award Mechanism: Pilot grant program

Role: Principal Investigator

Award Dates: Summer of 2022-Summer 2023

Funds requested \$25,000

Major Goal: The purpose of this proposal is to establish psychometric properties (reliability, validity, responsiveness) of a pragmatic knee kinetic assessment scheme for rehabilitation following anterior cruciate ligament (ACL) reconstruction. This pilot will fuel a planned NIH R01 application (PAR-21-053) for a large Clinical Observational study. Our ultimate goal is to reshape knee rehabilitation using a heretofore untapped outcome measure of knee kinetics to modernize clinical progression and decision-making paradigms.

R01 Grant Mechanism - 1 R01 (NIH Appl. ID: 9798812 Application ID: 1 R01)

FOA: [PA18-484] - NIH Research Project Grant (Parent R01 Clinical Trial Not Allowed)

Resubmission scored 24th percentile with initial submission priority score at 50th percentile.

Role: Principal Investigator 35-25% effort (Multiple PI – Terese Chmielewski)

Awarding Institution: National Institutes of Health – NIAMS

Award Date: 04/01/2020 - 03/31/2025

Funds: Total funds to UM portion of the award \$1,376,522 (directs = \$966,441; indirects=\$410,081)

Overall request for funds in excess of \$3.48 million

Title: *Can Psychological and Movement Impairments Distinguish a Safe Return to Sport after ACL Reconstruction?*

Project Description: The objective of this proposal is to identify psychological and movement measures in the early period after ACL reconstruction that can distinguish a safe return-to-sport outcome. Aim 1 will define the trajectory of psychological and movement measures during rehabilitation; Aim 2 will identify the additional contribution of psychological and movement measures, beyond standard clinical exam, to a safe return-to-sport outcome; and Aim 3 will use individual interviews with patients and clinicians to gain

perceptions of psychological and movement impairments in rehabilitation and return to sport.

Department of Defense: Congressionally Directed Medical Research Programs

Log Number: PR191164

PI: Ryan Mizner

Application Title: Transforming Knee Injury Rehabilitation Guidelines using Pragmatic Measures of Knee Loading

Award Mechanism: FY19 Peer Reviewed Medical Research Program - Investigator-Initiated Research Award

Role: Principal Investigator (33% AY, and 66% summer)

Award Dates: July 2019 - June 2021

Funds requested \$1,266,033

Translational Scholars Research Program

Role: Principal Investigator

Scored: well but no specifics other than “encouraged to reapply next year”

Awarding Institution: The Institute of Translational Health Sciences (a CTSA for the NIH at UWashingtton)

Dates: Aug 2017-Sept 2018

Funds: \$10,000 direct

Clinical Research Loan Repayment Program

Role: Principal Investigator

Scored: 4 “Very Good” from primary & 5 “Good” from secondary reviewer,

Awarding Institution: National Institutes of Health

Title: Novel Jump Training for Athletes with ACL reconstruction surgery

Dates: 7/1/2015-6/30/2017

Funds: \$22,000 of loan debt repayment to the PI

Small Pilot Project Grant – RESUBMISSION

Role: Principal Investigator (10% effort)

Scored 2-6 on the NIH 1-9 scoring system and no aggregate score given

Awarding Institution: Institute of Translational Health Services, CTSA at the University of Washington

Submitted: 10/01/2013

Award Date: 12/01/2013 - 11/30/2014

Title: Impact of a Unique Unweighting System to Mitigate Joint Stress during Jump Retraining After ACL Reconstruction

Funds: \$14,150

Small Pilot Project Grant – Pre-application submitted and invited to full proposal (top half of applicants)

Role: Principal Investigator (10% effort)

Scored on a range of 2-5 with each reviewer using the new 1-9 NIH scoring system

Awarding Institution: Institute of Translational Health Services, CTSA at the University of Washington

Award Date: 07/01/2013 - 06/30/2014

Title: Impact of a Unique Unweighting System to Mitigate Joint Stress during Jump Retraining

Funds: \$14,150

Pilot Project Grant

Role: Principal Investigator (10% effort)

Awarding Institution: Boston Rehabilitation Outcomes Center (ROC)

No score given but encouraged to submit future applications

Award Date: 06/01/2013 - 05/31/2014

Title: Exploring the Psychological Response to ACL Injury as a Key Intermediary of Patient Outcomes

Funds: \$32,400

Research Grant Application

Role: Principle Investigator (25% effort)

Awarding Institution: Foundation for Physical Therapy

Submitted: 8/17/2011

Preliminary score of 2.6 to earn panel discussion with final score of 3.0 (1-5 scoring similar to NIH)

Award Dates: 1/1/2012 – 12/31/2012

Title: Jump Landing and Retraining in Physically Active Patients with ACL Reconstruction

Funds: \$40,000

Proposed Subproject Award

Title: Reducing Participation Restrictions in Adults with Chronic Diseases through Rehabilitation and Wellness Intervention

Role: Co-Investigator (5% effort) (PI: Tom Seekins, PhD)

Submitted Sept 2009, Not funded and no score given

Funds: \$31,550

Orthopaedic Section Research Grant

Role: Principal Investigator (6% effort, 37% of laboratory RA)

Grant Score was 262 (100-500 scoring scale with 100 best)

Awarding Institution: Orthopaedic Section of the APTA

Award Dates: 4/15/2011 – 4/15/2012

Title: Efficacy of High Intensity Sensory Stimulation (HISS) for Knee Extensor Tendinopathy

Funds: \$25,000

Project Grant for CPWR

Role: Co-Investigator (Anton D, PI) No scoring provided

Awarding Institution: DHHS/NIOSH - The Center for Construction Research and Training (CPWR)

Award Date: 07/01/2009 - 06/30/2014

Title: Longitudinal Effect of an Ergonomic Training Intervention for Cement Masons & Bricklayers

Funds: \$750,000

Life Science Discovery Fund: LSDF-01

Role: Consultant (Lapier T, PI)

Awarding Institution: Life Science Discovery Fund Award date: 7/08-6/11

Title: Promoting Exercise and Increased Physical Activity Behavior in Patients with Coronary Heart Disease Recovering from Surgery (Not Scored)

Funds: \$711,287

New Investigator Grant (Originally '05 scored 2.08 NIH 1-5 score, **Revision submitted in '06 score 1.96**)

Role: Principle Investigator

Awarding Institution: Arthritis Foundation Award date: 7/2007-6/2009

Title: Impact of Ambulatory Activity on Function after Total Knee Arthroplasty

Funds: \$100,000

Clinical Research Loan Repayment Program

Role: Principle Investigator

Awarding Institution: National Institutes of Health Award Dates: 7/2007-6/2009

Score was 257 and pay line was at 175

Title: Impact of Ambulatory Activity on Function after Total Knee Arthroplasty

Funds: \$ 42,757

Orthopaedic Medicine Research Grant

Role: Principle Investigator

Awarding Institution: Aircast Foundation Award date: 9/2007-8/2009

Scored a 4.0 (NIH 1-5 scoring scale)

Title: Efficacy of Core Strengthening in Injury Prevention Programs for Female Athletes

Funds: \$100,000

Peer Reviewed Publications:

1. Kinney AE, Richmond SLK, **Mizner RL**. Cervical spine sensorimotor deficits persist in people post-concussion despite minimal symptoms. *Annals of Medicine*. 2024. 56:1, 2422048, DOI: 10.1080/07853890.2024.2422048
2. **Mizner RL**, Mays AA, Mays RJ. Mechanical adaptations in walking using carbon fiber ankle foot orthoses for patients with peripheral artery disease. *Gait Posture*. 2023 Mar;101:14-20. doi: 10.1016/j.gaitpost.2023.01.008. Epub 2023 Jan 13. PMID: 36696821
3. Christensen JC, Pelt CE, Foreman KB, LaStayo PC, Anderson AE, Gililand JM, **Mizner RL**. Longitudinal study of knee load avoidant movement behavior after total knee arthroplasty with recommendations for future retraining interventions. *Knee*. 2021 Jun;30:90-99. PMID: 33878682
4. Choma EA, Mays RJ, **Mizner RL**, Santasier AM. Patient perspectives of ankle-foot orthoses for walking ability in peripheral artery disease: A qualitative study. *J Vasc Nurs*. 2020 Sept;38(3):100-7. PMID: 32950110.
5. Pairet-de-Fontenay B, Willy R, Elias AR, **Mizner RL**, Dubé M, Roy J. Running Biomechanics in Individuals with Anterior Cruciate Ligament Reconstruction: A Systematic Review. *Sports Medicine*. 2019 Sep;49(9):1411-1424. doi: 10.1007/s40279-019-01120-x. PMID: 31102111.
6. Mays RL, Mays AA, **Mizner RL**. Efficacy of Ankle-Foot Orthoses on Walking Ability in Peripheral Artery Disease. *Vascular Medicine*. 2019 Aug;24(4):324-331. doi: 10.1177/1358863X19831765. Epub 2019 Mar 29. PMID: 30924412
7. Christensen JC, **Mizner RL**, Foreman KB, LaStayo PL, Peters C, Pelt C. Preoperative Quadriceps Weakness Preferentially Predicts Postoperative Aberrant Movement Patterns During High-Demand Mobility Following Total Knee Arthroplasty. *Knee*. 2019 Jan;26(1):79-87. doi:10.1016/j.knee.2018.12.005. Epub 2018 Dec 29. PMID: 30600199
8. Christensen JC, Foreman KB, LaStayo PC, Marcus RL, Pelt CE, **Mizner RL**. Comparison of 2 Forms of Kinetic Biofeedback on the Immediate Correction of Knee Extensor Moment Asymmetry Following Total Knee Arthroplasty During Decline Walking. *J Orthop Sports Phys Ther*. 2019 Feb;49(2):105-111. doi:10.2519/jospt.2019.7800. [Epub ahead of print]. PMID: 30124352.
9. Christensen JC, **Mizner RL**, Marcus RL, Pelt CE, LaStayo PC. Quadriceps weakness preferentially predicts detrimental gait compensations among common impairments after total knee arthroplasty. *Journal of Orthopaedic Research (J Orthop Res)*. 2018 Sep;36(9):2355-2363. doi: 10.1002/jor.23894. Epub 2018 Apr 24. PMID: 29577425.
10. Elias AR, Harris K, LaStayo PC, **Mizner RL**. Clinical Efficacy of Jump Training Augmented With Body Weight Support After ACL Reconstruction: A Randomized Controlled Trial. *American Journal of Sports Medicine (Am J Sports Med)*. 2018 Jun;46(7):1650-1660. doi: 10.1177/0363546518759052. Epub 2018 Mar 20. PMID: 29558161
11. Christensen JC, LaStayo PC, **Mizner RL**, Marcus RL, Pelt CE, Stoddard GJ, Foreman KB. Joint Mechanical Asymmetries During Low- and High-Demand Mobility Tasks: Comparison Between Total Knee Arthroplasty and Healthy-Matched Peers. *Gait Posture*. 2018 Feb;60:104-110. PMID 29175639.
12. Christensen JC, LaStayo PC, Marcus RL, Stoddard GJ, Foreman KB, **Mizner RL**, Peters CL, Pelt CE. Novel Biofeedback Technique Normalizes Gait Abnormalities During High-Demand Mobility After Total Knee Arthroplasty. *Knee*. 2018 Jan;25(1):73-82. PMID: 29305025.

13. Elias ARC, Hammill CD, **Mizner RL**. The Effect of Body Weight Support on Kinetics and Kinematics of a Repetitive Plyometric Task. *J Applied Biomech*. 2016 Feb;32(1):69-77. PMID: 26398961
14. Elias ARC, Kinney AE, **Mizner RL**. High Repetition Jump Training Coupled with Body Weight Support in a Patient with Anterior Cruciate Ligament Reconstruction: A Case Report. *International Journal of Sport Physical Therapy (IJSPT)*. 2015 Dec;10(7):1035-49. PMID:26672476.
15. Elias ARC, Hammill CD, **Mizner RL**. Changes in Quadriceps and Hamstring Co-contraction Following Landing Instruction in Patients with ACL Reconstruction. *J Orthop Sports Phys Ther*. 2015 Apr;45(4):273-80. PMID: 25679342.
16. Jones D, Tillman SM, Tofte K, **Mizner RL**, Greenberg S, Moser MW, Chmielewski TL. Observational Ratings of Frontal Plane Knee Position Are Related to the Frontal Plane Projection Angle But Not Knee Abduction Angle During a Step Down Task. *J Orthop Sports Phys Ther*. 2014 Dec;44(12):973-8. PMID: 25366084.
17. Davidson BS, Judd DL, Thomas AC, **Mizner RL**, Eckhoff DG, Stevens-Lapsley JE. Muscle activation and coactivation during five-time-sit-to-stand movement in patients undergoing total knee arthroplasty. *Journal of Electromyography and Kinesiology (J Electromyogr Kinesiol)*. 2013 Dec;20(12):426-431. PMID: 23352711.
18. Yoshida Y, **Mizner RL**, Snyder-Mackler L. Association between long-term quadriceps weakness and early walking muscle co-contraction after total knee arthroplasty. *Knee*. 2013 Dec;20(12):426-431. PMID: 23352711.
19. Anton D, **Mizner RL**, Hess JA. The Effect of Lift Teams on Kinematics and Muscle Activity of the Upper Extremity and Trunk. *Journal of Orthopaedic and Sports Physical Therapy*. 2013 Apr;43(4):232-241. PMID: 23321695.
20. Hess JA, **Mizner RL**, Kincl L, Anton D. Alternatives to lifting concrete masonry block over rebar: Biomechanical and perceptual evaluations. *Ergonomics (Ergonomics)*. 2012 Oct;55(10):1229-42. PMID: 22849706.
21. **Mizner RL**, Chmielewski TC, Toepke JJ, Tofte KB. Efficacy of Digital Video Techniques during a Drop Jump Compared to Three-Dimensional Knee Kinematics and Kinetics of Female Athletes. *Clinical Journal of Sport Medicine*. 2012 May;22(3):221-7. PMID:22544058.
22. **Mizner RL**. Emerging Perspectives Related to Quadriceps Central Activation Deficits in Patients with Total Knee Arthroplasty. *Exerc Sport Sci Rev*. 2012 Apr;40(2):61-62. PMID:22441557.
23. **Mizner RL**, Petterson SC, Clements KE, Zeni JA, Irrgang JJ, Snyder-Mackler L. Measuring Functional Improvement after Total Knee Arthroplasty Requires both Performance-based and Self-Report Assessments: A Longitudinal Analysis of Outcomes. *J Arthroplasty*. 2011 Aug;26(5):728-37. Epub 2010 Sep 20. PMID:20851566
24. Harty CM, DuPont CE, Chmielewski TL, **Mizner RL**. Inter-task Comparison of Frontal Plane Knee Position and Moment in Female Athletes during Three Distinct Movement Tasks. *Scandinavian Journal of Medicine & Science in Sports. Scand J Med Sci Sports*. 2011 Feb;21(1):98-105. doi: 10.1111/j.1600-0838.2009.01022.x. PMID: 19895386.
25. Stevens-Lapsley JE, Petterson SC, **Mizner RL**, Snyder-Mackler L. Impact of Body Mass Index on Functional Performance Measures after Total Knee Arthroplasty. *J Arthroplasty*. 2010 Oct;25(7):1104-9. Epub 2009 Oct 30. PMID: 1987972.

26. **Mizner RL**. Invited Commentary - Quantifying Self-Report Measures' Overestimation of Mobility Scores Postarthroplasty. *Phys Ther*. 2010 Sep;90(9):1296-8. PMID:20810390
27. LaPier TK, **Mizner R**. Outcome Measures in Cardiopulmonary Physical Therapy: Focus on the Late Life Function and Disability Instrument (LLFDI). *Cardiopulm Phys Ther Journal*. 2009 June; 20(2): 32-35.
28. Meier WA, Marcus RL, Dibble LE, Foreman KB, Peters CL, **Mizner RL**, LaStayo PC. The Long-Term Contribution of Muscle Activation and Muscle Size to Quadriceps Weakness Following Total Knee Arthroplasty. *J Geriatr Phys Ther*. 2009 June 32(2): 35-38.
29. LaStayo PC, Meier WA, Marcus RL, **Mizner RL**, Dibble LE, Peters C. Reversing Muscle and Mobility Deficits 1 to 4 Years after TKA: A Pilot Study. Symposium: Advanced Techniques for Rehabilitation after Total Hip and Knee Arthroplasty. *Clin Orthop Relat Res*. 2009 June; 467:1493–1500.
30. Petterson SC, **Mizner RL**, Stevens JE, Rasis L, Bodenstab A, Newcomb W, Snyder-Mackler L. Improved Function From Progressive Strengthening Interventions After Total Knee Arthroplasty: A Randomized Clinical Trial With an Imbedded Prospective Cohort. *Arthritis and Rheumatism (Arthritis Care and Research)*. 2009 Feb;61(2):174-183.
31. Stevens NM, Shutlz T, **Mizner RL**, Gersh MR. Treatment in an Outpatient Setting for a Patient with an Infected, Surgical Wound with Hypergranulation Tissue. *International Journal of Lower Extremity Wounds (Int J Low Extrem Wounds)*. 2009 Mar;8(1):37-44.
32. **Mizner RL**, Kawaguchi JK, Chmielewski TL. Lower Extremity Kinetic Chain Muscle Strength Does Not Predict Post-Instruction Landing Pattern Improvement in Female Athletes. *Journal of Orthopaedic and Sports Physical Therapy*. 2008 June; 38(6): 265-271.
33. Meier W, **Mizner RL**, Marcus RL, Dibble LE, Peters C, LaStayo PC. Total Knee Arthroplasty: Muscle Impairments, Functional Limitations and Recommended Rehabilitation Approaches. *Journal of Orthopaedic and Sports Physical Therapy*. 2008 May;38(5):246-56.
34. Yoshida Y, **Mizner RL**, Ramsey D, Snyder-Mackler L. Examining Outcomes From Total Knee Arthroplasty and the Relationship Between Quadriceps Strength and Knee Function Over Time. *Clinical Biomechanics (Bristol, Avon)*. 2008 Mar;23(3):320-8.
35. **Mizner RL**, Snyder-Mackler L. Altered Loading During Walking and Sit-to-stand is Affected by Quadriceps Weakness after Total Knee Arthroplasty. *Journal of Orthopaedic Research*. 2005 Sep;23(5):1083-90
36. **Mizner RL**, Petterson SC, Stevens JE, Axe MJ, Snyder-Mackler L. Preoperative Quadriceps Strength Predicts Functional Ability One Year after Total Knee Arthroplasty. *Journal of Rheumatology*. 32 (8): 1533-9. Aug 2005. Indexed in the "Yearbook of Rheumatology, Arthritis & Musculoskeletal Disease"
37. **Mizner RL**, Petterson SC, Snyder-Mackler L. Quadriceps Strength and the Time Course of Functional Recovery after Total Knee Arthroplasty. *Journal of Orthopaedic and Sports Physical Therapy*. 35:424-436, July 2005.
38. **Mizner RL**, Petterson SC, Stevens JE, Vandenborne K, Snyder-Mackler L. Early Quadriceps Strength Loss After Total Knee Arthroplasty: The Contributions of Muscle Atrophy and Failure of Voluntary Muscle Activation. *Journal of Bone and Joint Surgery (Am)*. 87; 5:1047-53, May 2005.
39. Stevens JE, **Mizner RL**, Snyder-Mackler L. Neuromuscular Electrical Stimulation for Quadriceps Muscle Strengthening after Bilateral Total Knee Arthroplasty. A Case Series. *Journal of Orthopaedic and Sports Physical Therapy*. 34; 1; 21-9; Jan 2004.

40. Stevens JE, **Mizner RL**, Snyder-Mackler L. Quadriceps strength and volitional activation before and after total knee arthroplasty for osteoarthritis. *Journal of Orthopaedic Research*. 21; 5; 775-779; 2003.
41. **Mizner RL**, Stevens JE, Snyder-Mackler L. Voluntary Activation and Decreased Force Production of the Quadriceps Femoris Muscle after Total Knee Arthroplasty. *Physical Therapy*. 81; 4; 156-86; April 2003.

Peer-Reviewed National and International Scientific Presentations:

1. **Mizner RL**, Erickson S, Gray RL Optimal Kinematic Predictors of Quadriceps Underloading during Step-up Exercises after ACL Reconstruction. Poster presentation accepted for the Academy of Orthopaedic Physical Therapy for the Combined Sections of the American Physical Therapy Association in Anaheim, CA, Feb 2026.
2. **Mizner RL**, Willy RW. Patients Exhibit a Persistent Knee Underloading Response to Progressive Squat Demands After ACL Reconstruction. Platform presentation for the Academy of Orthopaedic Physical Therapy for the Combined Sections of the American Physical Therapy Association in Houston TX, Feb 2025.
3. **Mizner RL**, Reisman DS, Cheff SM, Jarvis R, Willy RW. Adding Knee-specific Cues to Squats Retraining with Force Insoles Catalyzes Corrective Reloading after ACL Reconstruction. Poster presentation for the Academy of Orthopaedic Physical Therapy for the Combined Sections of the American Physical Therapy Association in Houston TX, Feb 2025.
4. **Mizner RL**, Willy RW. Pronounced and Persistent Underloading of the Operated Knee's Joint Surfaces during Exercise after ACL Reconstruction. In-person presentation as a Thematic Poster. Annual Meeting of the American College of Sports Medicine (ACSM). Boston, MA, May 2024.
5. Miller C, **Mizner RL**, Walters M, Santasier A. Exploring Influential Factors in Healthcare Decision-Making of Urban and Rural Montanans with Knee Osteoarthritis. Poster presentation for the Academy of Orthopaedic Physical Therapy for the Combined Sections of the American Physical Therapy Association in Boston, MA, Feb 2024.
6. **Mizner RL**, Willy RW. Knee extensor underloading during squatting adds to clinical predictions of quadriceps strength after ACL Reconstruction. Platform presentation for the Academy of Orthopaedic Physical Therapy for the Combined Sections of the American Physical Therapy Association in Boston, MA, Feb 2024.
7. Mays RJ, Mays AA, **Mizner RL**. Attenuation of Calf Pain Using Ankle-Foot Orthoses during Walking Performance Testing in Patients with Peripheral Artery Disease. Moderated Poster Session. Society for Vascular Medicine. 2023 Vascular Scientific Sessions in Washington, DC, Sept, 2023.
8. Miller Zondlo C, **Mizner RL**. The Rurality Effect: Examining Physical Therapy Utilization for Knee Osteoarthritis in the 2-Years Prior to Total Knee Arthroplasty in Montana. Poster: Social Determinants and Social Needs. Academy Health Annual Research Meeting. Seattle, WA. June 2023.
9. Krantz A, **Mizner RL**, Fouts H, Attwood E, Willy RW. Knee Underloading Behaviors during Running Post-Aclr Are Not Accentuated with Added Load Carriage. Poster for the American Academy of Sports Physical Therapy for the Combined Sections of the American Physical Therapy Association in San Diego, Feb 2023.
10. Fouts H, **Mizner RL**, Krantz A, Attwood E, Willy RW. Asymmetrical Knee Loading Is Present with Load Carriage during a Stepdown Post-Aclr. Poster for the American Academy of Sports Physical Therapy for the Combined Sections of the American Physical Therapy Association in San Diego, Feb 2023.

11. Roda NA, Harry TE, **Mizner RL**. Discriminative and Construct Validity of the Anterior Reach Test in SubAcute ACL Rehabilitation. Poster presentation for the American Academy of Sports Physical Therapy for the Combined Sections of the American Physical Therapy Association in San Diego, Feb 2023.
12. Harry, TE, Roda NA, **Mizner RL**. Patients Underutilize Their Knee Extensor Moment Capacity during Sit-to-Stand While in Subacute ACL Rehabilitation. Poster presentation for the American Academy of Sports Physical Therapy for the Combined Sections of the American Physical Therapy Association in San Diego, Feb 2023.
13. Attwood E, **Mizner RL**, Krantz A, Fouts H, Willy RW. Inertial measurement units overestimate knee loading symmetry in running and walking tasks post-ACLR. Poster presentation for the American Academy of Sports Physical Therapy for the Combined Sections of the American Physical Therapy Association in San Diego, Feb 2023.
14. **Mizner RL**, Heidema, C. Force Platforms Can Accurately Predict Knee Kinetics Limb Asymmetry with Sit-to-Stands During ACL Rehabilitation. Poster for the Annual Meeting of the American College of Sports Medicine in San Diego, CA. May 2022.
15. Elias AR, **Mizner RL**. Individualized Training Improves Inter-Limb Joint Kinetic Symmetry During Jump Landing after ACL Reconstruction. Poster at the Annual Meeting of the American College of Sports Medicine in San Francisco, CA. May 2020.
16. **Mizner RL**, Elias AR. Jump Landing Mechanics Fail to Distinguish Patients' Return to Sport Status After ACL Reconstruction. Platform presentation in the American Academy of Sports Physical Therapy for the Combined Sections Meeting (CSM) of the American Physical Therapy Association in Denver, CO. 2020.
17. Choma EA, Fiecas MJ, **Mizner RL**, Treat-Jacobson DJ, Mays RJ. Development and Validation of a Model for Predicting Peak Walking Time for Patients with Peripheral Artery Disease. Submitted to the Society for Vascular Medicine. McLean, VA. May 2019.
18. Miller RH, Davis IS, van den Bogert AT, **Mizner RL**, Dorschky E. Can Biomechanical Models Improve Injury Prevention and Human Performance? Two-hour symposia at the Annual Meeting of the American College of Sports Medicine. Orlando, FL, May 2019.
19. Pairet-de-Fontenay B, Willy RW, Elias ARC, **Mizner RL**, Dubé MO, Roy JS. Running kinetics after anterior cruciate ligament reconstruction: a systematic review. Presented at World Confederation for Physical Therapy. Geneva, Switzerland. May 11th, 2019.
20. Zarzycki R, Chmielewski TL, **Mizner RL**, Meierbachtol A. Can fear or other psychological factors alter movement after ACL reconstruction? Two-hour symposia for the Research Section of the Combined Sections Meeting of the American Physical Therapy Association (APTA). Washington, D.C. Jan 2019.
21. **Mizner RL**, Elias AR. Jump Training improves Psychological Impairments and Facilitates Greater Sports Participation in Athletes with ACL Reconstruction. Poster for the American College of Sports Medicine Annual Meeting. Minneapolis, MN. May 2018. *Selected for Clinician's Reception of top 11 clinical abstracts at the ACSM Annual Meeting.*
22. Crippen TJ, Odonnell HR, Quinoñes FJ, **Mizner RL**. Impairments Distal to the Hip are Associated with Peak Hip Adduction during Single Leg Landings after ACL Reconstruction. Poster Session in the Sports Section of the APTA for CSM 2018. New Orleans, LA.
23. Brooks JL, Elias AR, **Mizner RL**, Mischke JJ. Effects of Neuromuscular Re-education with Jump Training in Female Athlete with Increased Lower Extremity Risk for Injury. Poster Session in the Sports Section of the APTA for CSM 2018. New Orleans, LA.

24. Mischke JJ, Matthew K, **Mizner RL**. The Successful Management of Persistent Mid-Portion Achilles Tendinopathy using Sural Nerve Mobilizations and a Heavy-Slow Resistance Program in a Collegiate Softball Player. Poster Presentation in the Sports Section of the Combined Sections Meeting of the American Physical Therapy Association at New Orleans, LA. 2018.
25. Choma EA, Mays RJ, **Mizner RL**, Santasier AM. Patients' Perspectives Regarding Ankle-Foot Orthoses to Improve Walking Mobility for People with Peripheral Artery Disease. Poster presentation in the Cardiovascular and Pulmonary Section for the Combined Sections Meeting of the APTA in New Orleans, LA 2018.
26. Dettman DL, Johnson AR, Mischke JJ, **Mizner RL**. Task Demands and Biomechanical Analysis of Performance during the Single Leg Hop for Distance Test after ACL Reconstruction. Poster presentation in the Sports Section for the Combined Sections Meeting (CSM) of the American Physical Therapy Association in New Orleans, LA 2018.
27. **Mizner RL**, Mays AA, Mays RJ. Mechanical adaptations in walking performance using ankle-foot orthoses for patients with peripheral artery disease. 64th Annual Meeting of the American College of Sports Medicine and 8th World Congress on Exercise is Medicine in Denver, CO, IN 2017. Published in Med Sci Sports Exerc. 2017;49(5S):588.
28. Christensen JC, LaStayo PC, **Mizner RL**, Marcus RL, Pelt CE, Foreman KB. Biofeedback Results in Gait Characteristics Similar to Controls with Decline Walking after Total Knee Arthroplasty. Poster at the Gait and Clinical Movement Analysis Society (GMCAS) annual meeting in Salt Lake City, Utah, May 2017. **Winner of Best Poster Award.**
29. Christensen JC, LaStayo PL, Foreman KB, **Mizner RL**, Marcus RL, Gililland JM, Peters CL, Pelt CE. Biofeedback Improves Joint Mechanic Symmetry During High-Demand Mobility After Total Knee Arthroplasty. Poster presentation at the American Academy of Orthopaedic Surgeons (AAOS) for their 2017 Annual Meeting in San Diego, CA. Published in the Journal of Bone and Joint Surgery American version in 2017.
30. Elias ARC, Harris KJ, LaStayo PC, **Mizner RL**. Clinical Effectiveness of Jump Training Augmented with Body Weight Support Following ACL Reconstruction. APTA Combined Sections Meeting in San Antonio, TX. Feb 2017. Accepted for a Platform Session. Published in JOSPT 2017.
31. KB Foreman, Christensen JC, **Mizner RL**, Marcus RL, Pelt C, LaStayo PL. Decline walking reveals pronounced deficits in physical performance of patients compared to over-ground walking after total knee arthroplasty. APTA Combined Sections Meeting in San Antonio, TX. Feb 2017. Platform Session in the Orthopaedic Section. Published in JOSPT 2017.
32. Ostertag SA, **Mizner RL**. Modified Locomotor Training Protocol Improves Gait Using a Novel Body Weight Support System and Orthoses. Poster Presentation to the Combined Sections Meeting of the APTA. San Antonio Tx, Feb 2017, Neurology Section. .
33. Christensen JC, Foreman K, Marcus RL, **Mizner RL**, Pelt C, LaStayo PL. Novel biofeedback technique normalizes gait abnormalities during decline walking after total knee arthroplasty. Poster Session in the Orthopaedics Section at the APTA Combined Sections Meeting in San Antonio, TX. Feb 2017. Published in JOSPT in Feb 2017.
34. Christensen JC, Lastayo PC, Marcus RL, **Mizner RL**, Pelt CE, Foreman K. Real-time biofeedback of knee kinetics corrects pronounced joint mechanic asymmetry during both low- and high-demand walking tasks following total knee arthroplasty. Presented as a Platform presentation in the **Marilyn Gossman Graduate Student Special session in the Section of Research** at the APTA Combined Sections Meeting in San

Antonio, TX. Feb 2017.

35. Kinney AE, Richmond SE, Mizner RL. Persistent deficits in cervical spine mobility and joint position error postconcussion: A case for cervical spine screening despite near resolution of neurocognitive symptoms. Annual AAOMPT meeting Oct 2016. ***Awarded Annual Best Cervical Spine Presentation.***
36. Mays RJ, Mays AA, **Mizner RL**. Efficacy of Ankle-Foot Orthoses on Walking Ability in Peripheral Artery Disease: The AFO for PAD Trial I. Society Vascular Medicine (SVM) 27th Annual Scientific Sessions. June 2016. Long Beach, Ca. Poster Presentation. Published in the VASCULAR MEDICINE, 21(3) Pages: 297-297 Meeting Abstract: 7 Published: JUN 2016.
37. Christensen JC, Foreman KB, **Mizner RL**, Marcus RL, Pelt CE, Lastayo PC. Real-Time Biofeedback Using Knee Kinetics on Lower Extremity Mechanics During Decline Treadmill Walking Following Total Knee Arthroplasty. 2016 Gait and Clinical Movement Analysis Society's Annual Conference. May 17 - 20, 2016 in Memphis, TN..
38. Christensen JC, Lastayo PC, **Mizner RL**, Marcus RL, Pelt CE, Foreman KB. Preliminary Efficacy of a Superior Method of Biofeedback to Improve Limb Loading Symmetry During Decline Walking Following Total Knee Arthroplasty. 2016 Gait and Clinical Movement Analysis Society's Annual Conference. May 17 - 20, 2016 in Memphis, TN.
39. **Mizner RL**, Elias ARC. Differential Influence of Knee Pain with Activity on Patient-Reported Versus Performance-Based Long-Term Outcomes after Anterior Cruciate Ligament Reconstruction. Combined Sections Meeting of the American Physical Therapy Association (APTA). Poster in the Orthopaedics Section. Anaheim, CA. February 2016. JOSPT; Jan 46(1):A118. ***Nominated for Academy of Orthopaedic Physical Therapy Best Poster Award.***
40. Elias ARC, **Mizner RL**. Mechanical and Neuromuscular Changes with Jump Training Following ACL Reconstruction. Combined Sections Meeting of the American Physical Therapy Association (APTA). Platform presentation in the Orthopaedics Section. Anaheim, CA Feb 2016. Published in JOSPT 2016. Jan 46(1);A9.
41. **Mizner RL**. The Value of Biomechanical Data to Enhance Clinical Reasoning after ACL Reconstruction. A Featured Session at ACSM for the Biomechanics Interest Group (BIG). San Diego, CA. May 2015. Published in Medicine and Science in Sports and Exercise (MSSE). 2015 May;47(5 Suppl).
42. Elias ARC, **Mizner RL**. High Volume Jump Training Coupled with Body Weight Support in a Patient with Anterior Cruciate Ligament Reconstruction. Combined Sections Meeting of the American Physical Therapy Association (APTA). Poster Presentation in the Orthopaedics Section. Indianapolis, IN. Feb 2015. JOSPT Jan 45(1).Supplement A76. ***Nominated for Academy of Orthopaedic Physical Therapy Best Poster Award.***
43. Elias ARC, **Mizner RL**. Associating clinical and biomechanical measures of single leg performance after anterior cruciate ligament reconstruction. Combined Sections Meeting of the American Physical Therapy Association (APTA). Poster Presentation in Research Section. Indianapolis, IN. Feb 2015. JOSPT Jan 45(1).Supplement.
44. Ketterling LM, **Mizner RL**. Impact of Thigh Muscle Recruitment on Limb Loading during Jump Landing after Anterior Cruciate Ligament Reconstruction. Combined Sections Meeting of the American Physical Therapy Association (APTA). Platform Presentation in Sports Section. Indianapolis, IN. Feb 2015. JOSPT Jan 45(1).Supplement.
45. **Mizner RL**, Chmielewski TL. Mechanical & Psychological Factors in ACL Reconstruction Rehabilitation. Session Proposal. Combined Sections Meeting of the American Physical Therapy Association.

Indianapolis, IN. Feb 2015. Featured Session with the Research Section of the APTA.

46. Stackhouse SK, Craik R, Rudolph K, Wagner J, **Mizner RL**, Lemley K, Cleland J. Setting yourself up for success at intuitions without an established research culture. Session Proposal for the Early Career Development Special Interest Group in the Research Section. Combined Sections Meeting of the American Physical Therapy Association. Indianapolis, IN. Feb 2015.
47. Elias ARC, Hammill CD, **Mizner RL**. A New Direction in Plyometrics: The Effect of Unweighting on Performance of Box Jumps. Combined Sections Meeting of the American Physical Therapy Association (APTA). Poster Presentation in the Orthopaedics Section. Las Vegas, NV. Feb 2014. JOSPT Jan 44(1).Supplement.
48. Lubbers A, Hawbaker M, Pattison K, Hammill CD, **Mizner RL**. Acute Effects of a Novel Body Weight Support System on Lower Extremity Landing Kinetics and Kinematics. Combined Sections Meeting of the American Physical Therapy Association (APTA). Poster Presentation in the Orthopaedics Section. Las Vegas, NV. Feb 2014. JOSPT Jan 44(1).Supplement.
49. Butler RJ, **Mizner RL**. Post-operative Considerations in Total Joint Arthroplasty: Post-Operative Physical Therapy. Oral Presentation. 3rd Annual Orthopedic Team Member Course entitled, "Integrated in the Management of Hip and Knee Patients". Sponsored by the American Association of Hip and Knee Surgeons (AAHKS). November 8th, 2013. Dallas, Texas.
50. Elias ARC, Hammill CD, **Mizner RL**. Adaptation of Quadriceps and Hamstring Co-contraction Following Landing Instruction in Patients with ACL Reconstruction. 60th Annual Meeting of the American College of Sports Medicine and 4th World Congress on Exercise is Medicine in Indianapolis, IN 2013. Med Sci Sports Exerc. 2013 May;45(5 Suppl).
51. Hammill CD, Elias ARC, **Mizner RL**. Neuromuscular Maladaptations During Single Leg Landing in Patients with Unilateral ACL Reconstruction. 60th Annual Meeting of the American College of Sports Medicine and 4th World Congress on Exercise is Medicine in Indianapolis, IN 2013. Med Sci Sports Exerc. 2013 May;45(5 Suppl).
52. Davidson BS, Judd DL, Thomas AC, **Mizner RL**, Eckhoff DG, Stevens-Lapsley JE. Change in Hamstring Activation During Stand-To-Sit Movement Following Total Knee Arthroplasty. 60th Annual Meeting of the American College of Sports Medicine and 4th World Congress on Exercise is Medicine in Indianapolis, IN 2013. Med Sci Sports Exerc. 2013 May;45(5 Suppl).
53. **Mizner RL**, Santos AD. Acute Training Changes in Jump Landing Performance in Patients with ACL reconstruction. Combined Sections Meeting of the APTA. Poster Presentation in the Orthopaedics Section. San Diego, CA. Jan 2013. JOSPT Jan 43(1).Supplement.
54. **Mizner RL**, Mahlum BT. Clinical Utility of an Injury Specific Psychological Survey for Long-Term ACLR Outcomes. Combined Sections Meeting of the APTA. Platform Presentation in the Sports Section. San Diego, CA. Jan 2013. JOSPT Jan 43(1).Supplement.
55. Butler RJ, **Mizner RL**. Post-operative Consideration in TJA- Post-operative Physical Therapy. Oral Presentation. 2nd Annual Orthopedic Team Member Course entitled, "The Role of Allied Health Professionals in the Management of Hip and Knee Patients". Sponsored by the American Association of Hip and Knee Surgeons (AAHKS). November 2012. Dallas, Texas.
56. Dewitz M, Gollehon C, Kokes J, **Mizner RL**. Residual Compromised Knee Performance During Single Leg Landings in People with ACL Reconstruction. 59th Annual Meeting of the American College of Sports Medicine and 3rd World Congress on Exercise is Medicine in San Francisco, CA 2012. Med Sci Sports Exerc. 2012 May;44(5 Suppl);620.

57. Kokes J, Gollehon C, Dewitz M, Santos AD, **Mizner RL**. Fear and Muscle Strength are Correlated to Knee Kinetics During Jump Landings after ACL Reconstruction. 59th Annual Meeting of the American College of Sports Medicine and 3rd World Congress on Exercise is Medicine in San Francisco, CA 2012. Med Sci Sports Exerc. 2012 May;44(5 Suppl);621.
58. Gollehon C, Dewitz M, Kokes J, **Mizner RL**. Perceptions of Function Differ from Quantitative and Qualitative Tests of Physical Performance After ACL Reconstruction. 59th Annual Meeting of the American College of Sports Medicine and 3rd World Congress on Exercise is Medicine in San Francisco, CA 2012. Med Sci Sports Exerc. 2012 May;44(5 Suppl);947.
59. Malouf J, McCarthy S, Ostertag S, **Mizner RL**. Improved balance, expanded limits of stability, and reduced trunk and pelvic compensatory strategies with locomotor training in a person with chronic stroke. Submitted to the Neurology Section of the APTA for the Combined Sections Meeting in Chicago, IL Feb 2012.
60. Judd DL, Thomas AC, Davidson BS, Eckhoff DG, **Mizner RL**, Stevens-Lapsley JE. Lower Extremity Muscle Activity in End-Stage Knee Osteoarthritis During a Five-Time-Sit-to-Stand Task. 58th Annual Meeting and 2nd World Congress on Exercise is Medicine of the American College of Sports Medicine in Denver, CO 2011. Med Sci Sports Exerc. 2011 May;43(5 Suppl).
61. Davis IS, Butler RJ, Barrios J, **Mizner RL**. Knee Changes from the Sports Injury to the TKA: Clinical Biomechanics. Invited 3 hour Oral presentation for the Biomechanics Special Interest Group in the Research Section. Combined Sections Meeting of the APTA. New Orleans, LA. Feb 2011.
62. Messer AJ, VanWassenhove A, Vander Linden D, Cronin B, **Mizner RL**. Effects of Age and Gender on Gains Following Sports Performance Training in Adolescent Athletes. 57th Annual Meeting and inaugural World Congress on Exercise is Medicine of the American College of Sports Medicine in Baltimore, MD 2010. Med Sci Sports Exerc. 2010 May;42(5 Suppl).
63. VanWassenhove A, Messer AJ, Vander Linden D, Cronin B, **Mizner RL**. Changes in Jumping and Agility Tests Following Sports Performance Training in Youth Athletes: A Retrospective Study. 57th Annual Meeting and inaugural World Congress on Exercise is Medicine of the American College of Sports Medicine in Baltimore, MD 2010. Poster presentation. Med Sci Sports Exerc. 2010 May;42(5 Suppl).
64. Van Schoonhoven CE, Hays J, Christiansen J, Vander Linden D, **Mizner RL**. Characteristic Differences in Patients with Total Joint Replacement Who are Discharged from the Hospital Setting to Either Home or to Extended Care Facilities. Annual Meeting of the APTA. Boston, MA. June 2010. Poster Presentation in Acute Care.
65. Hays J, Van Schoonhoven CE, Christiansen J, Vander Linden D, **Mizner RL**. Does the Timing of the Start of Physical Therapy Treatment Impact Hospital Length of Stay Following Total Hip and Knee Arthroplasty? Annual Meeting of the APTA. Boston, MA. June 2010. Poster Presentation in Acute Care.
66. Goldrick S, Anton D, Hess J, Kincl L, **Mizner RL**. Analysis of Two Ergonomic Interventions to Lifting Concrete Blocks Over Rebar Wall Supports in the Masonry Trade. Platform Presentation. Combined Sections Meeting of the APTA. Platform Presentation in the Orthopaedics Section. San Diego, CA. Feb 2010. JOSPT Jan 40(1).Supplement.
67. Davis IS, Butler RJ, Barrios J, **Mizner RL**. A Biomechanical Approach to Restoring Function in Knee Osteoarthritis: Incorporating Evidence Into Clinical Practice. Invited 1.5 hour Oral presentation for the Biomechanics Special Interest Group in the Research Section. Combined Sections Meeting of the APTA. San Diego, CA. 2010.

68. Toepke JJ, Chmielewski TL, **Mizner RL**. Efficacy of Digital Video Techniques to Estimate Knee Alignment of Females during a Drop Jump. May 2009. 2557: board #202 May 28 9:00 AM - 10:30 AM. 56th Annual Meeting of the American College of Sports Medicine. Seattle, WA. May 2009. Poster Presentation. Med Sci Sports Exerc. 2009 May;41(5 Suppl).
69. Yoshida Y, **Mizner RL**, Snyder-Mackler L. Quadriceps Muscle Activity, Quadriceps Hamstring CoContraction and the Persistence of Quadriceps Weakness after TKA for Osteoarthritis. Electronic Poster Presentation. 7th Biennial International Society of Arthroscopy, Knee Surgery and Orthopaedic Sports Medicine (ISAKOS) Congress, Osaka, Japan; April 5-9, 2009.
70. Anton D, Hess J, Kincl L, **Mizner RL**. Ergonomic Innovations for the Masonry Industry. Applied Ergonomics, Reno, NV March 2009.
71. Harty CM, Dupont CE, Chmielewski TL, **Mizner RL**. Inter-task Correlation of Frontal Plane Knee Position and Moment in Female Collegiate Athletes. Combined Sections Meeting of the APTA. Platform Presentation in the Sports Section. Las Vegas, NV. Feb 2009. JOSPT Jan 2009 39(1):A106.
72. Spiegel K, Anton D, **Mizner RL**, Hess J, Baxter T. Comparison of the Shoulder Kinematics and Muscle Activity between 1-Mason and 2-Mason Lift Teams using 12-inch Concrete Block. Combined Sections Meeting of the APTA. Platform Presentation in the Orthopaedics Section. Las Vegas, NV. Feb 2009. JOSPT Jan 2009 39(1):A34.
73. Baxter T, Anton D, **Mizner RL**, Hess J, Spiegel K. Lumbar Muscular Activity of Apprentice Masons Utilizing 1-Person and 2-Person Lifting of 12-Inch Concrete Block. Combined Sections Meeting of the APTA. Platform Presentation in the Orthopaedics Section. Las Vegas, NV. Feb 2009. JOSPT Jan 2009 39(1):A37.
74. Dupont CE, Harty CM, Chmielewski TL, **Mizner RL**. Lower Extremity Strength of Female Athletes Relates to Sagittal Plane Kinematics During a Step Down Task. 1437: board #176 May 28 9:30am - 11:00 AM. 55th Annual Meeting of the American College of Sports Medicine. Indianapolis, IN. May 2008. Poster Presentation. Med Sci Sports Exerc. 2008 May;40(5 Suppl):S212.
75. Petterson SC, **Mizner RL**, Stevens JE, Rasis L, Bodenstab A, Newcomb W, Snyder-Mackler L. Enhanced Quadriceps Strength After Knee Arthroplasty: Randomized Trial of Neuromuscular Stimulation. Accepted for Oral Paper Presentation #223 at the March 6, 2008 75th Annual Meeting of the American Academy of Orthopaedic Surgeons in San Francisco, CA.
76. Stevens JE, **Mizner RL**, Petterson SC, Snyder-Mackler L. Evidence-based Practice Guidelines for Managing Patients after Total Knee Arthroplasty. 1.5 hour symposium in the Geriatrics and Orthopaedics Section. Combined Sections Meeting (CSM) of the American Physical Therapy Association in Nashville, TN. Feb 2008.
77. Petterson SC, **Mizner RL**, Snyder-Mackler L. Quadriceps Femoris Muscle Recovery after Total Knee Arthroplasty. Poster presented in the Physiology section of the Joint meeting of the Physiological Society, Biochemical Society and British Pharmacological. Glasgow, UK. July 8-12, 2007.
78. Stevens JE, Petterson SC, **Mizner RL**, Snyder-Mackler L. Relationship between Body Mass Index and Functional Performance Measures after Total Knee Arthroplasty. Annual Meeting for the APTA. June 2007. Denver, CO. Poster Presentation.
79. Dupont CE, Chmielewski TL, Kawaguchi J, **Mizner RL**. Neuromuscular Control of The Lower Extremity By Female Athletes During a Step Down Task. 1650: board #140 may 30 2:00 PM - 3:30 PM. 54th Annual Meeting of the American College of Sports Medicine. New Orleans, LA. June 2007. Poster Presentation. Med Sci Sports Exerc. 2007 May;39(5 Suppl):S263.

80. Harty CM, Kawaguchi J, Chmielewski TL, **Mizner RL**. Relationship between Muscular Strength and Lower Extremity Posture of Female Athletes during Drop Vertical Jumps. 608: may 30 3:45 PM 4:00 PM. 54th Annual Meeting of the American College of Sports Medicine. New Orleans, LA. June 2007. Platform Presentation. Med Sci Sports Exerc. 2007 May;39(5 Suppl):S23.
81. Fletcher RM, Chmielewski TL, Kawaguchi J, **Mizner RL**. The Relationship between Hip Mechanics and Knee Loading During Single Leg Landing in Female Athletes. 606: may 30 3:15 PM 3:30 PM. 54th Annual Meeting of the American College of Sports Medicine. New Orleans, LA. June 2007. Platform Presentation. Med Sci Sports Exerc. 2007 May;39(5 Suppl):S22.
82. Speer SM, Kawaguchi J, Chmielewski TL, **Mizner RL**. Can Muscular Strength within the Kinetic Chain Predict Athletes' Improvement in Performance with Landing Training? 610: may 30 4:15 PM - 4:30 PM. 54th Annual Meeting of the American College of Sports Medicine. New Orleans, LA. June 2007. Platform Presentation. Med Sci Sports Exerc. 2007 May;39(5 Suppl):S23.
83. Yoshida Y, **Mizner RL**, Ramsey DK, Snyder-Mackler L. Quadriceps Strength, Functional Performance and Gait Symmetry after Total Knee Arthroplasty. Accepted for Combined Sections Meeting APTA. February, 2007. Boston, MA. Poster Presentation in the Orthopaedics Section. JOSPT Jan 37(1):A61.
84. Farquhar SJ, **Mizner RL**, Snyder-Mackler L. Altered Loading Patterns During a Sit-to-Stand Task 3 Months after Total Knee Arthroplasty Persist for at Least One Year. 53rd Annual Meeting of the Orthopaedic Research Society. February 2007 San Diego, CA. Poster Presentation.
85. Yoshida Y, **Mizner RL**, Ramsey DK, Snyder-Mackler L. Altered Gait Patterns After Unilateral Total Knee Arthroplasty. 53rd Annual Meeting of the Orthopaedic Research Society. February 2007 San Diego, CA. Poster Presentation.
86. Contreras E, **Mizner RL**. Relationship between Quadriceps Muscle Weakness and Relative Disuse in Patients with Knee Osteoarthritis. 2006 Annual Biomedical Research Conference for Minority Students (ABRCMS), November 2006. Anaheim, California. Poster presentation.
87. **Mizner RL**, Clements KE, Petterson SC, Snyder-Mackler L. Patients' Perceptions Do Not Match Functional Performance or Clinical Presentation After Total Knee Arthroplasty. OsteoArthritis Research Society International 10th World Congress. December 2005. Boston, MA. Poster Presentation.
88. **Mizner RL**, Petterson SC, Snyder-Mackler L. Quadriceps Strength and the Time Course of Functional Recovery after Total Knee Arthroplasty. Combined Sections Meeting APTA. February 2005. New Orleans, LA. Platform Presentation in Orthopaedics Section. JOSPT Jan 35(1):A2-3.
89. Petterson SC, **Mizner RL**, Snyder-Mackler L. Determinants of Knee Range of Motion after Total Knee Arthroplasty. Combined Sections Meeting APTA. February 2005. New Orleans, LA. Poster Presentation in Geriatrics Section.
90. **Mizner RL**, Snyder-Mackler L. Altered Loading During Walking and Sit-to-stand is Affected by Quadriceps Weakness after Total Knee Arthroplasty. 51th Annual Meeting of the Orthopaedic Research Society, February 2005. Washington, DC. Poster presentation. *FINALIST FOR NEW INVESTIGATOR RECOGNITION AWARD*.
91. Petterson SC, **Mizner RL**, Snyder-Mackler L. Quadriceps Femoris Strength, Cross-Sectional Area, and Muscle Activation in Patients with Knee Osteoarthritis and Total Knee Arthroplasty. OsteoArthritis Research Society International (OARSI) 9th World Congress. December 2004. Chicago, IL. Platform Presentation.

92. **Mizner RL**, Petterson SC, Stevens JE, Axe MJ, Snyder-Mackler L. Impaired Preoperative Quadriceps Strength Influences Functional Outcome a Year after Total Knee Arthroplasty. American College Rheumatology/Association of Rheumatological Health Professionals Annual Scientific Meeting. October 2004. San Antonio, TX. Platform Presentation. 2004 Arthritis and Rheumatism 50(9): S704-S704
93. Petterson SC, **Mizner RL**, Snyder-Mackler L. Quadriceps Femoris Atrophy and Activation Impairment in Patients with Severe Knee Osteoarthritis. American College Rheumatology/Association of Rheumatological Health Professionals Annual Scientific Meeting. October 2004. San Antonio, TX. Platform Presentation. SEP 2004 Arthritis and Rheumatism 50(9): S705-S705.
94. **Mizner RL**, Petterson SC, Stevens JE, Vandenborne K, Snyder-Mackler L. Morphological and Neural Contributions to Early Changes in Quadriceps Strength after Total Knee Arthroplasty. 50th Annual Meeting of the Orthopaedic Research Society, March 2004. San Francisco, CA. Poster presentation.
95. Petterson SC, **Mizner RL**, Snyder-Mackler L. Factors that influence six-minute walk in individuals after total knee arthroplasty. Combined Sections Meeting APTA. February 2004. Nashville, TN. Poster Presentation in Geriatrics Section.
96. **Mizner RL**, Petterson SC, Snyder-Mackler L. Importance of Knee Extensor Strength in Outpatient Rehabilitation after Total Knee Arthroplasty. Combined Sections Meeting APTA. February 2004. Nashville, TN. Platform Presentation in Orthopaedics Section
97. **Mizner RL**, Stevens JE, Petterson SC, Vandenborne K, Snyder-Mackler L. Morphological and Neural Contributions to Early Changes in Quadriceps Strength after Total Knee Arthroplasty. NIH trainee workshop, National Center for Medical Rehabilitation Research, December 2003. Bethesda, MD. Poster presentation.
98. Petterson SC, **Mizner RL**, Snyder-Mackler L. Gender Differences in Strength and Function after Total Knee Arthroplasty. 50th Annual Meeting of the American College of Sports Medicine. San Francisco, CA. May 2003. Poster Presentation.
99. **Mizner RL**, Stevens JE, Snyder-Mackler L. Quadriceps Inhibition and Weakness in End-Stage Knee Osteoarthritis. 50th Annual Meeting of the American College of Sports Medicine. San Francisco, CA. May 2003. Poster Presentation.
100. Snyder-Mackler L, Stevens JE, **Mizner RL**. Randomized study of electrical stimulation after knee prostheses. The 7th International Conference Orthopaedic, Biomechanics Sports Rehabilitation, November 23-25, 2003, Grand Hotel Assisi, Assisi (Perugia), Italy.
101. **Mizner RL**, Stevens JE, Snyder-Mackler. Preoperative Quadriceps Strength Predicts Functional Outcome After Total Knee Arthroplasty. Combined Sections Meeting APTA. February 2003. Tampa, FL. Poster Presentation in Geriatrics Section.
102. Stevens JE, **Mizner RL**, Snyder-Mackler L. Neuromuscular Electrical Stimulation for Quadriceps Muscle Strengthening After Bilateral Total Knee Arthroplasty: A Case Series. Combined Sections Meeting. APTA. February 2003. Tampa, FL. Poster Presentation in Geriatrics Section.
103. **Mizner RL**, Stevens JE, Snyder-Mackler L. Quadriceps Strength and Volitional Activation Before and After Total Knee Arthroplasty for Osteoarthritis. 49th Annual Meeting of the Orthopaedic Research Society, February 2003. New Orleans, LA. Platform presentation.
104. Stevens JE, **Mizner RL**, Snyder-Mackler L. Neuromuscular Electrical Stimulation for Quadriceps Muscle Strengthening After Total Knee Arthroplasty. 49th Annual Meeting of the American College of Sports Medicine. St. Louis, MO. June 2002. Platform Presentation.

105. **Mizner RL**, Stevens JE, Snyder-Mackler L. The Etiology of Persistent Quadriceps Femoris Weakness Following Total Knee Arthroplasty. 49th Annual Meeting of the American College of Sports Medicine. St. Louis, MO. June 2002. Platform Presentation.
106. Stevens JE, **Mizner RL**, Snyder-Mackler L. Characteristics of Patients after TKA upon Entry to Outpatient Rehabilitation. Combined Sections Meeting. APTA. February 2002. Boston, MA. Platform presentation for Geriatrics Section.
107. **Mizner RL**, Stevens JE, Lang A, Snyder-Mackler L. Use of Electrical Stimulation to Restore Quadriceps Strength After Total Knee Arthroplasty. Case Report. Combined Sections Meeting. APTA. Boston, MA. February 2002. Platform presentation for Clinical Electrophysiology Section.
108. Stevens JE, **Mizner RL**, Snyder-Mackler L. Quadriceps Inhibition and Weakness after Total Knee Arthroplasty. American College Rheumatology/Association of Rheumatological Health Professionals Annual Scientific Meeting. October 2001. San Francisco, CA. Platform Presentation.

Regional and Local Scientific Presentations

1. **Mizner RL**, Reisman DS, Willy RW. Tech-Informed Neuromuscular Training (TNT) Corrects Muscular Underloading During Squat Exercises after ACL Reconstruction. Oral Platform presentation at the Annual Meeting of the Mountain West IDeA Clinical and Translational Research –Infrastructure Network (CTR-IN). Las Vegas, NV. Jan 2024.
2. **Mizner RL**. How Biomechanics Can Shape Clinical Interpretations of ACL Reconstruction Outcome Including Case-Based Examples. One-hour oral clinical symposium. American College of Sports Medicine’s Northwest Regional Chapter’s Annual Meeting. Boise, ID. Feb 2020.
3. Christensen JC, Foreman KB, **Mizner RL**, Marcus RL, Pelt CE, LaStayo PC. Real-Time Biofeedback Using Knee Kinetics on Lower Extremity Mechanics During Decline Treadmill Walking Following Total Knee Arthroplasty. Annual Regional National Occupational Research Agenda (NORA) Young/New Investigators Symposium, Platform Presentation, April 2016.
4. Mays RJ, **Mizner RL**, Mays AA. The clinical utility of ankle-foot orthoses in treating peripheral artery disease. Invited oral presentation. Dec 4th, 2015. Saint Patrick Hospital Friday Medical Conference, Missoula, MT.
5. Mays RJ, Mays AA, **Mizner RL**. Effect of Ankle-Foot Orthoses on walking ability in Peripheral Artery Disease: The AFO for PAD Trial. Platform oral presentation at the Annual conference for the Mountain West IDeA Clinical and Translational Research –Infrastructure Network (CTR-IN), Las Vegas, NV. 2015.
6. Elias ARC, **Mizner RL**. Mechanism of Injury Affects Neuromuscular Patterning of Hamstring and Quadriceps Following Anterior Cruciate Ligament Reconstruction. American College of Sports Medicine Northwest Regional Chapter’s Annual Meeting. Wenatchee, WA. April 2014.
7. Goldrick S, Anton D, Hess J, Kincl L, **Mizner R**. Analysis of Two Ergonomic Interventions to Lifting Concrete Blocks Over Rebar Wall Supports in the Masonry Trade. Poster presentation. 2010 Inland Northwest Health Sciences Research Symposium. April 2010.
8. Goldrick S, Anton D, **Mizner RL**. Preliminary Analysis of Ergonomic Alternatives to Lifting Concrete Blocks Over Rebar Wall Supports in the Masonry Trade. Poster presentation. 2009 Inland Northwest Health Sciences Research Symposium. April 2009.
9. DuPont CE, Harty CM, Chmielewski TL, **Mizner RL**. Hip Strength of Female Athletes Relates to Sagittal

Plane Leg Kinematics During a Step-Down. Oral Platform Presentation. 5th Annual Northwest Biomechanics Symposium. Boise, ID May 2008.

10. Harty CM, DuPont CE, Chmielewski TL, **Mizner RL**. Inter-Task correlation of frontal plane position and loading of the knee in female athletes. Oral Platform Presentation. 5th Annual Northwest Biomechanics Symposium. Boise, ID May 2008.
11. Mannenbach, J, Parkin, K, Vander Linden, D, **Mizner RL**. Variant and Invariant Characteristics of Knee Joint Kinematics During the Drop Vertical Jump Task in Female College Athletes. Oral Platform Presentation. 5th Annual Northwest Biomechanics Symposium. Boise, ID May 2008.
12. Parkin, K, Mannenbach, J, Vander Linden, DW, **Mizner RL**. Potential Ramifications of Knee Stiffness During Landing on Knee Injury Risk as well as Jump Height in Female College Athletes. Oral Platform Presentation. 5th Annual Northwest Biomechanics Symposium. Boise, ID May 2008.
13. Leitz, I, **Mizner R**, Anton, D, Hess, J. Low Back Kinematics Differences in Masons Using 1-Person and 2-Person Lift Team Using 12 Inch Concrete Block. Oral Platform Presentation. 5th Annual Northwest Biomechanics Symposium. Boise, ID May 2008.
14. Baxter T, Anton D, **Mizner R**, Hess J. Muscular Activity of Apprentice Masons During 1-Person and 2-Person Lifting of 12 Inch Concrete Block. Poster presentation. 5th Annual Northwest Biomechanics Symposium. Boise, ID May 2008.
15. Shelton MR, **Mizner RL**. Potential for the use of digital video cameras to aid in knee injury prevention screening of female athletes. Poster presentation. 2008 Inland Northwest Health Sciences Research Symposium. April 2008.
16. Dupont CE, Chmielewski TL, Kawaguchi J, **Mizner RL**. Neuromuscular control of the lower extremity by female athletes during a step-down. Poster Presentation. 2007 Inland Northwest Nursing & Health Sciences Research Symposium. Spokane, WA. April 2007.
17. Fletcher R, Chmielewski TL, Kawaguchi J, **Mizner RL**. The relationship between hip mechanics and knee loading during single leg landing in female athletes. Invited Oral Platform Presentation in the Developing Scholar Competition. 2007 Inland Northwest Nursing & Health Sciences Research Symposium. Spokane, WA. April 2007. **WINNER OF BEST DEVELOPING SCHOLAR AWARD.**

University Scientific Presentations

1. Elias ARC, **Mizner RL**. Changes in Neuromuscular Coordination with Jump Training After ACL Reconstruction. Graduate Student and Faculty Research Conference. Missoula, MT. April 2015.
2. Astrup L, Elias ARC, **Mizner RL**. Improvement in Patient-Reported Confidence and Function After Anterior Cruciate Ligament Reconstruction Using Jump Training. University of Montana's Annual Conference for Undergraduate Research (UMCUR). Missoula, MT April 2015.
3. Elias ARC, **Mizner RL**. Neuromuscular Patterning Of The Thigh Muscles Following Anterior Cruciate Ligament Reconstruction Varies With Mechanism Of Injury. Graduate Student and Faculty Research Conference. Missoula, MT. April 2014.
4. Elias ARC, Hammill CD, **Mizner RL**. Adaptation of Quadriceps and Hamstring Co-contraction Following Landing Instruction in Patients with ACL Reconstruction. Graduate Student and Faculty Research Conference. Missoula, MT. April 2013.
5. Goldrick S, Anton D, **Mizner RL**, Hess J, Kincl L. Analysis of Two Ergonomic Interventions for Lifting

Concrete Blocks Over Rebar Wall Supports in the Masonry Trade. 13th Annual Graduate & Undergraduate EWU Student Research and Creative Works Symposium. Cheney, WA. May 2010.

6. Goldrick S, Anton D, **Mizner RL**. Preliminary Analysis of Ergonomic Alternatives to Lifting Concrete Blocks Over Rebar Wall Supports in the Masonry Trade. Poster Presentation. 12th Annual Graduate & Undergraduate EWU Student Research and Creative Works Symposium. Cheney, WA. May 2009. **BEST RESEARCH POSTER AWARD IN SESSION.**
7. Moraski P, Anton D, **Mizner RL**, Hess J. Research to Practice: Mason Lift Team Instructional Video. Oral Platform Presentation. 12th Annual Graduate & Undergraduate EWU Student Research and Creative Works Symposium. Cheney, WA. May 2009.
8. Kitchen J, Anton D, **Mizner RL**, Hess J. On-Site Audit vs Telephone Survey: A Comparison of Different Survey Methodologies in the Mason Industry. Oral Platform Presentation. 12th Annual Graduate & Undergraduate EWU Student Research and Creative Works Symposium. Cheney, WA. May 2009.
9. Leitz I, **Mizner R**, Anton D, Hess J. Low back kinematics differences in mason between 1-person and 2-person lift teams laying 12 inch concrete block. Oral Platform Presentation. 11th Annual Graduate & Undergraduate EWU Student Research and Creative Works Symposium. Cheney, WA. May 2008.
10. Baxter T, Anton D, **Mizner R**, Hess J. Muscle activity of apprentice masons during 1-person and 2-person lifting of 12 inch concrete block. Poster presentation. 11th Annual Graduate & Undergraduate EWU Student Research and Creative Works Symposium. Cheney, WA. May 2008.
11. Spiegel K, Anton D, **Mizner R**, Hess J. Comparison of the shoulder kinematics and muscle activity between 1-mason and 2-mason lift teams using 12 inch concrete block. Oral Platform Presentation. 11th Annual Graduate & Undergraduate EWU Student Research and Creative Works Symposium. Cheney, WA. May 2008. **BEST RESEARCH ORAL PRESENTATION AWARD IN SESSION.**
12. Mannenbach J, Parkin K, Vander Linden D, **Mizner RL**. Variant and Invariant Characteristics of knee Joint Kinematics during the drop vertical jump task in female college athletes. Oral Platform Presentation. 11th Annual Graduate & Undergraduate EWU Student Research and Creative Works Symposium. Cheney, WA. May 2008.
13. Parkin K, Mannenbach J, Vander Linden D, **Mizner RL**. Potential ramifications of knee stiffness during landing on injury risk and jump performance in female athletes. Oral Platform Presentation. 11th Annual Graduate & Undergraduate EWU Student Research and Creative Works Symposium. Cheney, WA. May 2008. **HONORABLE MENTION ORAL RESEARCH PRESENTATION AWARD IN SESSION.**
14. Shelton MR, **Mizner RL**. Potential for the use of digital video cameras to aid in knee injury prevention screening of female athletes. Poster Presentation. 11th Annual Graduate & Undergraduate EWU Student Research and Creative Works Symposium. Cheney, WA. May 2008.
15. Rupp K, Toepke J, **Mizner RL**. Paradoxical Quadriceps Muscle Activation in People with Knee Osteoarthritis Performing Curb-Climbing Tasks. Poster Presentation. 11th Annual Graduate & Undergraduate EWU Student Research and Creative Works Symposium. Cheney, WA. May 2008. **HONORABLE MENTION RESEARCH POSTER AWARD IN SESSION.**
16. Toepke J, Rupp K, **Mizner RL**. Comparison of Knee Torque During the Four Conditions Associated with Curb Negotiation in Healthy Adults. Poster Presentation. 11th Annual Graduate & Undergraduate EWU Student Research and Creative Works Symposium. Cheney, WA. May 2008. **BEST RESEARCH POSTER AWARD IN SESSION.**
17. Cearns S, **Mizner RL**. Rehabilitation of a patient following right ACL reconstruction. Oral Platform

Presentation. 10th Annual Graduate & Undergraduate EWU Student Research and Creative Works Symposium. Cheney, WA. May 2007. **HONORABLE MENTION ORAL RESEARCH PRESENTATION AWARD IN SESSION.**

18. Shelton M, **Mizner RL**. Efficacy of digital video in the measurement of lower extremity position during a step-down test. Poster Presentation. 10th Annual Graduate & Undergraduate EWU Student Research and Creative Works Symposium. Cheney, WA. May 2007. **HONORABLE MENTION RESEARCH POSTER AWARD IN SESSION.**
19. Contreras E, **Mizner RL**. Relationship between Quadriceps Muscle Weakness and Relative Disuse in Patients with Knee Osteoarthritis: Pilot Data. Poster Presentation. 10th Annual Graduate & Undergraduate EWU Student Research and Creative Works Symposium. Cheney, WA. May 2007.
20. Dupont CE, Chmielewski T, Kawaguchi J, **Mizner RL**. Neuromuscular control of the lower extremity by female athletes during a step-down task. Poster Presentation. 10th Annual Graduate & Undergraduate EWU Student Research and Creative Works Symposium. Cheney, WA. May 2007. **BEST RESEARCH POSTER AWARD IN SESSION.**
21. Harty CM, Kawaguchi J, Chmielewski T, **Mizner RL**. Relationship between muscular strength and lower extremity posture of female athletes during drop vertical jumps. Oral Platform Presentation. 10th Annual Graduate & Undergraduate EWU Student Research and Creative Works Symposium. Cheney, WA. May 2007. **BEST RESEARCH ORAL PRESENTATION AWARD IN SESSION.**
22. Speer S, Kawaguchi J, Chmielewski T, **Mizner RL**. Can muscular strength within the kinetic chain predict athletes' improvement in performance with landing training? Oral Platform Presentation. 10th Annual Graduate & Undergraduate EWU Student Research and Creative Works Symposium. Cheney, WA. May 2007.
23. Fletcher RM, Chmielewski T, Kawaguchi J, **Mizner RL**. Relationship between hip mechanics and knee loading during single leg landing in female athletes. Oral Platform Presentation. 10th Annual Graduate & Undergraduate EWU Student Research and Creative Works Symposium. Cheney, WA. May 2007.
24. Rodgers J, **Mizner R**. Rehabilitation of a patient with persistent left anteriomedial knee pain. Poster Presentation. 9th Annual Graduate & Undergraduate EWU Student Research and Creative Works Symposium. Cheney, WA. May 2006.
25. Braun R, **Mizner R**. Physical therapy interventions for stress urinary incontinence: a case report. 9th Annual Graduate & Undergraduate EWU Student Research and Creative Works Symposium. Cheney, WA. May 2006.
26. Weinrich M, **Mizner R**. Physical therapy management of a patient with patellofemoral pain: a case report. Oral Platform Presentation. 8th Annual Graduate & Undergraduate EWU Student Research and Creative Works Symposium. Cheney, WA. May 2005.
27. Chantiny D, **Mizner RL**. Physical therapy interventions after spinal fusion. Poster Presentation. 8th Annual Graduate & Undergraduate EWU Student Research and Creative Works Symposium. Cheney, WA. May 2005.

Non-Peer Reviewed Publications:

Mizner RL. Support System. *Training and Conditioning*. 2017 April. 27(3):43-48.

Lower Extremity Review Magazine: Feb 2013: Recent scholarly work by Dr. Mizner was quoted and work cited that was submitted at the Combined Sections Meeting of the APTA related to the Clinical Utility of

Psychological Factors after ACL Reconstruction. The complete article “Fear factors: ACL-reinjury concerns sideline athletes” can be viewed on-line at the following URL: <http://lowerextremityreview.com/news/in-the-moment-sports-medicine/fear-factors-acl-reinjury-concerns-sideline-athletes>.

Lower Extremity Review Magazine: The work of Dr. Mizner and his colleagues at the University of Delaware were quoted multiple times in the feature article of the December 2010 issue of Lower Extremity Review magazine. In the article entitled “Good to go? Testing Key after TKA” freelance writer Barbara Boughton highlighted the findings of Dr. Mizner’s recently published article from the Journal of Arthroplasty this last September. The complete article can be viewed on-line at the following URL: <http://www.lowerextremityreview.com/article/good-to-go-testing-key-after-tka>.

Moraski P, Anton D, Mizner RL, Hess J. Lift Teams- Share the Load: Missing Pain Instead of Missing Work. Bricklayers and Allied Craftworkers (BAC) Journal, 2009 (4).

The Standard. Article entitled, “Ergonomic Motion Capture in the Field” to VICON PEAK motion capture systems. Oxford, UK. Published in Feb 2009. This magazine is a marketing and product development publication that is sent to all the clients of VICON PEAK company around the world. VICON is one of two top end motion capture systems in the world. The article is featuring the unique and creative application of the VICON camera system in the ergonomics related research.

Biomechanics Magazine: Aug 2007. Researchers split over strength training for ACL injury prevention. By Jordana Bieze Foster. Featuring Ryan L. Mizner and Tim Hewett work at the American College of Sports Medicine.

US Musculoskeletal Disease 2007 – Vol II: Short article invitation. Upon the recommendation of Dr. Dorothy Dunlop in the School of Medicine at Northwestern University, Chicago, IL. Submitted December 2006. To be published in May 2007

Title: The Importance of Maintaining a Strong Quadriceps Muscle in Patients with Knee Osteoarthritis. Touch Briefings as Publisher who is a confirmed Media Partner of the Bone and Joint Decade Initiative. US Musculoskeletal Disease 2006 will bring together leading experts from within this field, focusing on the relevant issues within each specialized sector. The editorial content for this comprehensive report is scheduled to contain articles covering all major areas of the Musculoskeletal Disease sector including, among others, Osteoporosis, Arthritis, Musculoskeletal Oncology, RA, Arthroscopy, Pain Management, Minimally Invasive Surgery, Sports Medicine, Pediatrics and Prosthetics and is sent to over 40,000 health professionals.

Reuters Aug. 12, 2005

Entitled: Strength before knee surgery predicts outcome. Improving quadriceps muscle ahead of operation may yield better results.

A summary article of the work published in the Journal of Rheumatology 2005.

The story was highlighted on the CNN ticker on August 15, 2005.

Other Scholarly Products:

Book chapter: Physical Therapies in Sport and Exercise. Chapter 20: Knee. Chmielewski, TL, Mizner, RL, Physical Therapies in Sport and Exercise. Edinburgh,UK: Elsevier Science Ltd; 2003

Provisional Patent Submissions

U.S. Patent Application Docket No. UMT-132P

AN UNWEIGHTING SYSTEM FOR RETRAINING TASKS

(Mizner, et al.)

Serial No. 61/731,458; Filed- November 29, 2012

U.S. Patent Application Docket No. UMT-132P2

AN UNWEIGHTING SYSTEM FOR RETRAINING TASKS

(Mizner, et al.)

Serial No. 61/899,741; Filed- November 4, 2013

Patent Submissions

U.S. Patent Application Docket No. UMT-132X
AN UNWEIGHTING SYSTEM FOR RETRAINING TASKS
(Mizner, et al.)
Serial No. 14/532,949; Filed- November 4, 2014.
Patent was ultimately rejected.

Continuing Education Workshops Conducted/Organized:

Presentations:

Everyday Evidence Based Practice in Orthopedic PT – 2 hour session
Current Updates for Treatment of the Knee – 8 hour session lecture and lab
Presenting evidenced based material for the Orthopaedic Manual Physical Therapy Educational series for the APTA accredited orthopedic clinical residency at the University of Montana.
Speaker and Instructor: Ryan L. Mizner
Autumn semester in Sept and Nov for 2017-2019

Invited Presentation: Value of clinical biomechanics in ACL reconstruction outcome assessment
Rhinehart Athletic Training Center Spring Symposium
May 4, 2014
Speakers: Ryan L. Mizner
Missoula, MT.
1 CE hour for ATC, MD, PT

Invited CE Offering at 2012 Montana Chapter APTA Fall Conference
Recommendations for Electrotherapy to Control Pain, Strengthen Muscle, and Improving Function
Speakers: Ryan L. Mizner and Susan Ostertag
Missoula, MT. September 30, 2012
CEU hours: 7.5 contact hours

Invited CE Offering at 2012 Montana Chapter APTA Fall Conference
Total Knee Replacement Rehabilitation
Speakers: Ryan L. Mizner
Missoula, MT. September 29, 2012
CEU hours: 7.5 contact hours

Invited CE Offering at 2012 North Carolina Chapter of APTA Fall Conference
What do we “know” about movement related outcomes?
Speakers: Robert J. Butler, Ryan L. Mizner, Philip J. Plisky
Durham, NC. March 2012
CEU hours: 2 contact hours

ACL Rehabilitation Workshop (August 2011)
From Injury Prevention to Long-Term Consequences
University of Montana Physical Therapy – Skaggs Building 117, 020
Speakers: Ryan L. Mizner and Airelle Hunter-Giordano
CEU hours: 15 contact hours for Physical Therapists and Physical Therapy Assistants

Two Total Knee Replacement Workshops held In June & in July 2011
Surgical and Rehabilitation Management in Home and Outpatient Settings
Riverpoint Campus Spokane, WA in June & MSU-Billings Campus in Billings in July

Speaker: Ryan L. Mizner, PT, PhD

CEU hours: 14 contact hours for Physical Therapists and Physical Therapy Assistants

Invited CE Offering at 2011 Montana Chapter APTA Spring Conference

A Practical and Evidence Based Workshop on Electrotherapy for Pain Control and Muscle Strengthening

Speakers: Ryan L. Mizner

Billings, MT. April 16-17, 2011

CEU hours: 4 contact hours

Total Knee Replacement Workshop II, August 2010

Surgical and Rehabilitation Management in Home and Outpatient Settings

University of Montana Physical Therapy – Skaggs Building

Speakers: Ryan L. Mizner and Jessica Malouf as Laboratory Assistant

CEU hours: 14 for Physical Therapists and Physical Therapy Assistants

Invited Evidence Based Practice Seminar

St. Patrick Hospital for their Rehabilitation Staff

March 31, 2010, Missoula, MT.

One Hour (0.1 CE unit) session on how to obtain evidence and levels of evidence designed for the rehabilitation staff of the hospital

Invited CE Offering at 2010 Montana Chapter APTA Winter Conference

Evidence Based Rehabilitation Considerations for Patients with ACL Reconstruction

Speakers: Ryan L. Mizner, Sara A. Scholtes

Fairmont Hot Springs, MT. January 23, 2010

CEU hours: 7 contact hours

APTA On-line Learning Center

Title: A Biomechanical Approach to Restoring Function in Knee Osteoarthritis: Incorporating Evidence Into Clinical Practice

Presenters: Joaquin A Barrios IV; Robert J Butler; Irene S Davis; Ryan Mizner

CEU: 0.2 CEUs (2 contact hours) will be awarded upon successful completion of a multiple choice test.

Course Level: Intermediate

Publication Date: April 2010

URL: http://iweb.apta.org/Purchase/productdetail.aspx?&product_code=LMS-166

Invited Keynote Workshop: Total Knee Arthroplasty Rehabilitation

Colorado Chapter of the APTA

Spring 2009 Convention

Speakers: Jennifer E. Stevens-Lapsley and Ryan L. Mizner

Denver, CO. April 19, 2009

CEU hours: 5.5 contact hours

Total Knee Replacement Workshop

Surgical and Rehabilitation Management in Outpatient Setting

EWU Riverpoint Campus, Health Science Building

Speakers: Ryan L. Mizner and Jennifer E. Stevens-Lapsley

CEU hours: 14 for Physical Therapists and Physical Therapy Assistants

ACL Workshop: From Injury Prevention to Long-Term Consequences

Department of Physical Therapy and Athletic Training Education Program

EWU Riverpoint Campus, Health Science Building

Speakers: Ryan Mizner, Airelle Hunter-Giordano

CEU hours: 16 for Physical Therapists and Athletic Trainers

Invited Lecture

Apex Physical Therapy Outpatient Services

“Muscle Strength and Lower Extremity Postures of Female Athletes during Landing and Following Instruction”

Spokane, WA

Date: Aug 11 2007

Science Ambassador Program: Evidence Based Practice Training

This workshop includes two 2 hour in-services to train rehabilitation professionals about EBP including: series of in-services that would describe/define EBP and identify why it is important to clinical work, how to obtain evidence and search tools, provide instruction on the basics of critical inquiry of literature, and provide examples of how EBP can shape practice. At the conclusion of the training, a monthly journal club will be initiated at the site with two mentored journal club experiences.

Nine Participating facilities included: Holy Family Hospital Inpatient Service, Sacred Heart Medical Center Inpatient Rehabilitation service, Shriners Hospital Rehabilitation Service, the Guild School’s rehabilitation team, Family Home Care, South Hill Physical Therapy Associates, U-District Physical Therapy and Sports Performance Institute, Apex Physical Therapy Outpatient care, St. Alphonsus Hospital Rehabilitation Services in Boise Idaho.

Hours: each site received 5 hrs of training

Spokane, WA

Spring Quarter 2007

Riverpoint Campus – EWU Rehabilitation Specialists Job Fair

“An Evidence Based Practice Summary of Surgical Outcomes and Treatment Recommendations for Patients with TKA”

Spokane, WA

May 2007

Lexington Clinic (Lexington, Kentucky) – CEU seminar related to Advancements in Total Knee Replacement. Invitation by Dr. Cale Jacobs, ATC, PhD

“Reducing postoperative quadriceps weakness and inhibition after TKA”.

Lexington, KY

March 2007

One Hour CEU

Holy Family Hospital: Outpatient Rehabilitation Facilities

Evidence Based Practice Training: This workshop includes three separate one hour in-services to train the outpatient therapists about EBP including: series of in-services that would describe/define EBP and identify why it is important to clinical work, provide instruction on the basics of critical inquiry of literature, and provide examples of how EBP can shape practice. At the conclusion of the training, a monthly journal club will be initiated at the site.

6 hours of CEU’s

Spokane, WA

Dates: Feb & March 2006

Journal Discussion Clubs Initiation

St. Luke’s Rehabilitation Institute: Outpatient Orthopaedic group

Organized and Led One Hour Discussions of 2-4 scientific articles

Topics: Meniscal Diagnostics and treatment, RCT’s of Shoulder Rehab, Use of Ultrasound imaging for biofeedback in Tx of LBP, Treatment of Stiff knee in TKA, Outcome Measures used in LBP, Articular Cartilage Defects

Dates: 6 monthly meetings from Nov 2006 – May 2006

Holy Family Hospital, Northpoint Facility, Outpatient Orthopaedic
Organized and Led 3 One Hour Discussion Groups at Each Facility
Topics: Efficacy of Spinal Traction, Meniscal Diagnostics and Treatment, Use of Ultrasound
Imaging for Biofeedback and Tx of LBP
Dates: April 2006, January 2007, February 2007

Membership in Scientific/Professional Organizations:

Membership:

American Physical Therapy Association – Orthopaedic, Sports, Research Academies
Occupational Health and Biomechanics Special Interest Groups
APTA Montana association
American College of Sports Medicine
Institute of Translational Health Sciences housed at the University of Washington

Consultative and Advisory Positions Held:

Committee Member: University of Utah, Salt Lake City, UT 2015-2017

PhD Doctoral Thesis Jesse Christensen, DPT, SCS (ABD with defense in spring 2017, Graduated 2018)
Exercise and Sports Science Program
Thesis Entitled: Lower Limb Joint Biomechanics During a High-Demand Mobility Task Following
Total Knee Arthroplasty: is limb symmetry important and amenable to change?

Committee Chair and Mentor: University of Montana, Missoula, MT 2012-Dec 2015 (PhD conferred)

PhD Doctoral Thesis: Audrey Elias, PT, DPT, PhD, OCS
Individual Interdisciplinary Program
Thesis entitled: Improving Mechanical and Neuromuscular Deficits following Anterior Cruciate
Ligament Reconstruction

High School Student Mentor: Big Sky High School, Missoula, MT. 2011-2013

Advanced Problems in Science Program: Science Department at BSHS with Mr. Honzel
Anna Johnson: Junior & Senior in at BSHS
6 hours a week of work and mentor time in the Movement Science Lab

Consultant:

University of Utah Seed Grant, 2005-07
PI: Paul LaStayo, PT, CHT, PhD
Effort: 0% (In-kind donation of time)

Committee Member: University of Delaware, Newark, DE 2005-2007

Masters Thesis: Yuri Yoshida, BSPT
Biomechanics and Movement Science Program
Thesis Entitled: Gait Characteristics of Individuals with Total Knee Arthroplasty

Committee Member: University of Utah, Salt Lake City, UT 2005-07

Doctoral Thesis Whitney Meyers, PT, OCS (Withdrew and completed DPT instead)
Exercise and Sports Science Program
Thesis Entitled: The effects of resistance exercise on quadriceps strength, activation, atrophy, and
overall mobility following a total knee replacement.

Committee Member: Eastern Washington University. Cheney, WA. 2006

Masters Thesis in Exercise Science: Michelle Floch, ATC
2nd Committee member (She withdrew from the program for personal health reasons)
Thesis Entitled: The Relationship of Lower Extremity Strength on Kinematics during Functional

Maneuvers in Female Athletes

Committee Member: Eastern Washington University. Cheney, WA 2007.

Masters Thesis in Adult Education: Tammy Elaine Lewis, PT

3rd Committee Member

Thesis Entitled: Physical Therapy Program at EWU: Student Impact and Curriculum Study

Undergraduate Mentor: Eastern Washington University. Cheney, WA 2006

McNair Scholars Program

Elizabeth Contreras: Senior in Biology Department

Project Title: "Relationship between Quadriceps Muscle Weakness and Relative Disuse in Patients with Knee Osteoarthritis"

Undergraduate Mentor: Eastern Washington University. Spokane, WA. 2006-7

Internship Program: Department of Physical Education, Health & Recreation

Michael Shelton: Undergraduate in Exercise Science Program

15 credits of internship for the year with Dr. Jeni McNeal as his faculty mentor

Committee Member: Eastern Washington University. Cheney, WA 2008.

Masters Thesis Project in Occupational Therapy: 3rd Committee Member

Thesis Entitled: Exploring Occupational Performance in Driving Under the Influence (DUI) Drug Courts Tracy Bogh, Segornae Douglas, Diana Fletcher, Kristen Heacox, Kevin Watkins

Mentor: Gregory Wintz, OTR/L, PhD

Community and Professional Service:

AOPT Research Awards workgroup selection committee 2023-2026

The AOPT Research Awards workgroup is composed of 8 members, including the workgroup Chair. The workgroup is responsible for seeking nominations, nominating, and selecting the Rose Award.

JOSPT Awards Selection Committee 2023-2026

I served as one of 2 members of the AOPT Research Awards workgroup as the AOPT representative contributing to the selection of the JOSPT Awards, including the **George J. Davies — James A. Gould Excellence in Clinical Inquiry Award** and **JOSPT Guy G. Simoneau Excellence in Research Award**. I reviewed and screened all the publications in JOSPT and JOSPT OPEN for the year of service to aid in selection of these awards.

Service to the Section on Research (SOR) of the American Physical Therapy Section

-Awards Committee Member, 2022, 2023, 2024, and Chaired the committee in 2024-2025

Academy of Physical Therapy Research – Biomechanics Special Interest Group (SIG) Reviewed, discussed, and scored submitted award applications for the SIG. Worked with SIG leadership to draft and refine the award selection guidance and procedures manual

Grant Review Committee member – Mountain West Center for Translational Research

Completed extramural grant reviews and served on the Scientific Review Committee for grant selection

May 2021 and 2023 via Zoom in Missoula, MT

We reviewed and scored 6 each prior to completing the committee's meeting.

Grant Review Committee member – Academy of Orthopedic Physical Therapy, APTA

Completed extramural grant reviews and served on the Scientific Review Committee for grant selection

Feb 2019 in Washington, DC, Feb 2020 in Denver, CO, and May 2024 live Zoom meeting conference. We reviewed and score about 8 grants each prior to the meeting. I am assigned 3-4 typically.

Manuscript Reviewer in the past for:

Clinical Biomechanics
Journal of Orthopaedic and Sports Physical Therapy
Medicine and Science in Sports and Exercise
Journal of Biomechanics
Journal of Arthroplasty
Journal of Orthopaedic Research
Physical Therapy Journal
Arthritis & Rheumatism
International Journal of Sports Physical Therapy: IJSPT
Arthritis Care and Research
Vascular Medicine
American Journal of Physical Medicine & Rehabilitation
Journal of Hand Therapy
Gait & Posture
Scandinavian Journal of Medicine & Science in Sports

Abstract Reviewer

- Academy of Orthopaedic Physical Therapy APTA
 - 2009-2026 for the Combined Sections Meeting of the APTA
 - Reviewed and scored 12-14 abstracts that were submitted for the APTA CSM meeting. Abstracts are about 350 words each, and a scoring rubric with comments is completed for each.
- American Academy for Sports Physical Therapy from the APTA
 - 2009-2026 for the Combined Sections Meeting of the APTA
 - Reviewed and scored 12-14 abstracts that were submitted for the APTA CSM meeting. Abstracts are about 350 words each, and a scoring rubric with comments is completed for each.
- Inland Northwest Health Science Symposium 2009
Spokane, WA.
- National Conference for Undergraduate Research (NCUR)
University of Montana Host Institution
Academic Year 2009-10
- Northwest Regional Chapter of the American Biomechanics Society
Northwest Biomechanics Symposium, 2008-09

American College of Sports Medicine

Invited Advisory and writing role in the development of their Exercise is Medicine Prescription for Health Series – Patient Centered Handout for Osteoarthritis
January and February 2019

St. Luke's Rehabilitation Institute Research Committee Member:

The committee fulfills roles as an advisor to research conducted involving SLRI as well as a clearing house for approval for new research involvements or changes to existing projects.
Membership Duration: November 2005 – 2009

Bioengineering Program. WSU Pullman Campus.

Invited Lecture in the 400 level Biomechanics course. April 2006. Entitled: “The role of biomechanics in Total knee replacement : A primer”.

Invited Moderator

Northwest Regional Chapter of the American Biomechanics Society
Northwest Biomechanics Symposium, 2008
Boise, ID. Human Factors Session.

Invited Tenure External Review of Adam Ladwig, PT, DPT, PhD
UNIVERSITY OF SOUTH DAKOTA
Department of Physical Therapy
Vermillion, SD 57069
Fall 2024

Invited Tenure External Review of Federico Pozzi, PT, PhD
University of Florida
Gainesville, FL
Department of Physical Therapy
Tenure Review Committee
July 2024

Invited Tenure External Review of Scott Stackhouse, PT, PhD
University of New England
Westbrook College of Health Professions
Department of Physical Therapy
Tenure Review Committee
July 2022

Invited Promotion to Full Professor External Review of Christine Pollard, PT, PhD
Oregon State University
College of Public Health
School of Biological and Population Health Science
Corvallis, Oregon 97331
October 2020

Invited Promotion to Associate Professor External Review of Dana Judd, DPT, PhD
University of Colorado School of Medicine
Department of Physical Medicine & Rehabilitation
12631 East 17th Avenue
Aurora, CO 80045
July 2020

Invited Promotion to Full Professor External Review of K. Bo Foreman, PT, PhD
Tenure-track Associate Professor
Department of Physical Therapy and Athletic Training
University of Utah, Salt Lake City
August 2019

Invited Promotion and Tenure External Review of Phil Plisky, PT, DSc, ATC, OCS
Tenure-track faculty member
Department of Physical Therapy
University of Evansville
Evansville, IN
August 2015

Invited Mid-Tenure External Review of Robin Marcus, PT, PhD, OCS
Tenure-track Assistant Professor
Department of Physical Therapy
University of Utah, Salt Lake City
August 2010

Invited Early-Tenure External Review of Robin Marcus, PT, PhD, OCS
Tenure-track Assistant Professor
Department of Physical Therapy
University of Utah, Salt Lake City
August 2011

- Invited participant this past spring for the APTA sponsored “Research Fly-in” to lobby our congressmen in Washington, D.C. for continued support for funding and appropriations for the National Institutes of Health that would benefit UM and Montana

- Member of the SOR’s Awards Committee, committed from 2013-2016.
Charge is to coordinate the Section’s nominations and write-ups for support of section member’s for APTA and Section of Research Awards. Work duties include: Search for appropriate candidates, review the nominations of others, complete numerous email exchanges, conference calls, and each member is responsible for at least one write-up for a nominee.

-Invited Content Expert in development of the APTA’s response to an APTA-sponsored report from the Arthritis Foundation entitled, “Environmental and Policy Strategies to Increase Physical Activity among Adults with Arthritis”, May 2012.

Services to the University/College/School on Committees/Councils/Commissions:

Departmental or Program Service

Elected Student-Faculty Representative
Biomechanics and Movement Science Program
Departments of Physical Therapy, Mechanical Engineering, Health & Ex. Science
University of Delaware
Academic year 2002-2003

Fill-in Physical Therapist for the Sports Performance Training Clinic
NSE Sports and Orthopaedic Clinic
Supervised 2nd and 3rd year students as they trained middle and high schools students to improve their physical performance and reduce their knee injury risk.
Clinic coordinator and supervisor: Brenda Mahlum

Presentation for the External Advisor Board Meeting
Open house style with Question and Answer about the Movement Science Laboratory
School of Physical Therapy
April 2010

Member – School of Physical Therapy and Rehabilitation Science
Director, Movement Science Laboratory, 9/09-Present
Member and Chair of the Faculty Unit Standards Working Group 2020
Research Committee, 9/2009-Present (Chair 2012-2013, 2020)
Professionalism and Academic Requirements Committee, 9/2009-Current
DPT Student Selection Committee, 2009-Present

Faculty Evaluation Committee, 2009-Present
Chair of the Faculty Evaluation Committee 2016-2020
DPT Scholarship selection Committee, 2009-present
Participant in Graduation Ceremonies 2010-present
Chair of the Faculty Advisory Committee for the Sports Residency, 5/2010-2014
Faculty member, Mentor, and Selection Committee member for Orthopedic Residency 2017-2020
Post-Graduate Programs Committee, 2012-2013 (Chair from Jan-May 2013)
All Clinics Staff meetings for Nora Staal Everett Clinics 8/2009-3/2011

Member of personnel search committees:

UMPT Faculty searches 2010, 2011, 2012, 2013, 2014, 2018, 2019
Chair of search committees in 2014, 2015, 2018, 2019, 2020
UMPT Administrative Associate II for the main office 2014 & 2015
UMPT Clinical Physical Therapy Instructor, 2015
Chair of the Search Committee for Hiring the School's Research Technician
For both the Summer and then the Fall of 2011

PROJECT DIRECTOR: Electronic Documentation/ Billing/ and Outcomes Assessment for the NSE Clinics
Summer 2010 – Spring of 2011: The purpose of this proposal is to explore and initiate the use of electronic documentation/billing system with for the Nora Staal Evert (NSE) Clinics. Project activities included exploring options for electronic documentation and billing that allow for consistent tracking of outcomes including clinical measures, financial, and patient satisfaction. Determine the best outcome measures for the NSE clinics to begin to implement this structure and set up a plan for continued implementation and review in the future. I have received repeated and consistent comments that since the learning curve for implementation has been completed that the new electronic records system has been a resounding success.

Member Department of Physical Therapy, Eastern Washington University, Spokane, WA.

Academic Years 2004-2009

Faculty Search Committee
Curriculum Committee
Research and Scholarship Committee
Admissions Committee

Eastern Washington University

Department of Physical Therapy

Student Recruitment activities including traveling to present at recruiting fairs and guided student tours

Eastern Washington University

Department of Physical Therapy

Chair of the Charles Farrow Scholarship Selection Committee Springs of 07 & 08

College Service

Member of the Research Working Group for the College 2017-2020

Member of the Student Affairs Working group for the College of Health 2016, 2018

Member of the Search Committee - Dean of College of Health Professions and Biomedical Sciences

University of Montana, Missoula

Committee formed recruitment strategy and advertisement, screened applicants, conducted interview, and compiled the College's collective recommendation for the Provost's office

Service during academic year 2013-2014

Presenter representing Physical Therapy (4 hours of presentations)

For activities such as MedStart Program, Big Sky Health Science Academy, National Biomechanics Day

Coordinated with assistance from the Western Montana Area Health Education Center

Program to encourage high school juniors and seniors from rural and disadvantaged areas to pursue a career in health and medicine fields. Generally, we work with 20-120 students visit each year.
July 2011-2020

Member of the Inland Northwest Health Sciences Symposium Planning Committee
Participating groups: EWU, INHS, WSU, Gonzaga, ISM
Represented the Health Sciences of EWU
Academic years 2006-09

Member of Occupational Therapy Faculty Search Committee
Department of Occupational Therapy
College of Science Health and Engineering
Spring and Summer 2007

Member of the Search Committee for Associate Dean of Health Science
College of Science, Health and Engineering
Eastern Washington University
Winter quarter 2006

Presented to the College Advisor Board meeting
College of Science, Health, and Engineering, Eastern Washington University
Entitle: "Total knee replacement: A look back and a step forward!"
Spring 2005

University Service

Committee member
University of Montana, Human Subjects Institutional Review Board (IRB)
Participate in full-board review as needed by UMT for its human subject's research. Also assisted in pre-full board reviews and feedback to streamline full-board review workflow. Meetings are held monthly throughout the year. Also, assisted in policy and procedure updates and review as needed.
Time of service: 2014 – Current

Poster Judge
12th Annual Graduate Student Research Symposium
University of Montana, Missoula
April 12, 2014

Abstract Reviewer for the National Conference on Undergraduate Research
University of Montana 2010

Member of the Athletic Policy Board
Eastern Washington University
Academic year 2005-2008

Member of the Student Research and Creative Works Symposium
Planning Committee and Judging Subcommittee
Eastern Washington University
Academic year 2005-9

Presented "THE SUCCESS AND SHORTCOMINGS OF TOTAL KNEE REPLACEMENT" at the 3rd Friday Seminar Series of WSU's Area Health Education Center as a Representative of EWU Health Sciences at Riverpoint.

Presented a Research overview and demonstration of my laboratory to members of a State of Washington Legislative Committee focused on the needs of Higher Education in the State. Summer 2005.

Provided a departmental research overview presentation for members of the State of Washington's Legislative Committee who were on the Prosperity Partnership Tour. Summer 2006.

Continuing Education Attended: **within the past 5 years**

Available upon request

Typical Teaching Responsibilities in the Entry-level UM Physical Therapy Program 2009-current

Fall Semester

PT 569 Musculoskeletal Management II: 4 credits Primary instructor and lead instructor for the knee content

PT 529 Clinical Biomechanics: 5 credits Primary and Sole instructor

Spring Semester

PT 527 – 3 credits Physical and Electrophysiological Agents – Primary Instructor and Lead instructor of electro

P 519 Musculoskeletal Management I 3 credits – Primary Instructor

PT 679 Trends and Scholarly Activities – 1 credit

PT 672 Research Credits 1-2 credits