

D. S. Blaise Williams III
CURRICULUM VITA
June 2016

1. PERSONAL INFORMATION

1.1 Name: Dorsey Shelton Williams III
1.2 Citizenship: United States of America
1.3 Home address: 5812 Lee Avenue
Richmond, Virginia 23226
1.4 Office address: Department of Physical Therapy
P.O. Box 980224
Virginia Commonwealth University
Richmond, VA 23298-0224
804-828-0234

2. LICENSURE

2.1 Licensure: Physical Therapy, State Board of Medical
Examiners of Virginia, License No.
2305206583

Physical Therapy, North Carolina Board of
Physical Therapy Examiners, License No.
P8130

3. EDUCATION

2000 Doctor of Philosophy, Interdisciplinary Graduate Program in
Biomechanics and Movement Science, University of Delaware,
Newark, Delaware.

1996 Master of Physical Therapy, University of Maryland, Baltimore,
Maryland.

1992 Bachelor of Arts, University of Virginia, Charlottesville, Virginia.

4. CLINICAL APPOINTMENTS, CONSULTANCIES AND RELATED ACTIVITIES

Physical Therapist (part-time)
VCU Sports Medicine
Richmond, Virginia
2013–present

Physical Therapy Consultant
Department of Dance and Choreography
Virginia Commonwealth University
Richmond, Virginia
2013-2014

Director of Rehabilitation and Research
Commonwealth Sports Medicine
Glen Allen, Virginia
2012-2013

Biomechanics Consultant
Furman Institute of Running and Scientific Training
Furman University
Greenville, South Carolina
2007-present

Physical Therapist (part-time)
ECU Physical Therapy Clinic
Greenville, North Carolina
2000-2012

Physical Therapy Consultant
School of Theatre and Dance
East Carolina University
2002-2012

Physical Therapist (part-time)
Physiotherapy Associates
Elkton, Maryland
1996-2000

5. ACADEMIC APPOINTMENTS AND PROFESSIONAL WORK EXPERIENCE

Adjunct Associate Professor
Department of Kinesiology and Health Sciences
Virginia Commonwealth University, Richmond, Virginia
2014-present

Associate Professor
Director, VCU RUN LAB
Department of Physical Therapy
Virginia Commonwealth University, Richmond, Virginia
2013-present

Professor
Rocky Mountain University of Health Professions
2012-2014

Adjunct Associate Professor
Department of Physical Therapy
East Carolina University
2012-present

Interim Associate Chair
Department of Physical Therapy
East Carolina University
2010-2011

Associate Professor
Department of Physical Therapy
East Carolina University
2006-2012

Director of Research and Graduate Studies
Department of Physical Therapy
East Carolina University
2006-2012

Director, Human Movement Research Laboratory and RACE
Department of Physical Therapy
East Carolina University
2003-2012

Assistant Professor
Department of Physical Therapy
East Carolina University
2000-2006

Primary Teaching Responsibilities at Virginia Commonwealth University

- PHTY 508 Orthopedic Physical Therapy I**
A 6-credit lecture and laboratory course designed to assist the entry-level physical therapy student in the development of examination skills for patients with musculoskeletal pathology. This course is based on current knowledge and theory contained within the medical and allied health literature. It emphasizes examination and evaluation skills for all of the extremities and the spine. Elementary treatment techniques are also presented in both lecture and laboratory experiences. Integration of material from gross anatomy and functional anatomy occur within this course. Materials emphasize foundational knowledge, interpretation, clinical decisions, and clinical applications. 2013-present.
- PHTY 648 Orthopedic Physical Therapy II**
A 6-credit lecture and laboratory course designed to assist the entry-level physical therapy student in the development of treatment skills for patients with musculoskeletal pathology. This course is based on current knowledge and theory contained within the medical and allied health literature. It emphasizes manual and therapeutic exercise skills for all of the extremities and the spine. Integration of material from gross anatomy, functional anatomy and Orthopedic Physical therapy I occur within this course. 2014-present.
- PHTY 691 Musculoskeletal PT for Complicated Patients**
A 1-credit lecture and laboratory hybrid course aims to synthesize information from the previous 2 orthopedic courses through case study examples, hands on practice, and lecture on the incorporation of musculoskeletal evaluation and treatment. A strong emphasis is placed on movement assessment and clinical reasoning in determining individualized physical therapy interventions based off of a comprehensive physical therapy evaluation. 2015-present.
- REMS 612 Advanced Biomechanics**
A 3-credit course being redesigned with a focus on current concepts in measurement, analysis and interpretation of the biomechanics of human movement.

Secondary Teaching Responsibilities at Virginia Commonwealth University

PHTY 624 Clinical Problem Solving. 2013-present.
PHTY 654 Clinical Problem Solving II. 2013-present.
PHTY 670 Clinical Integration. 2013-present.

Teaching Responsibilities at East Carolina University

PTHE 6114 Functional Anatomy. 2001-2004.
PTHE 8902 Advances in Lower Extremity Evaluation. 2001-2011
PTHE 8100 Musculoskeletal Physical Therapy I (Foot and Ankle). 2001-2011.
PTHE 8300 Musculoskeletal Physical Therapy II (Foot and Ankle). 2001-2011.
PTHE 8500 Musculoskeletal Physical Therapy III (Foot and Ankle). 2001-2011.
PTHE 8200 Clinical Biomechanics. 2005-2011.
PTHE 8702 Research Design. 2010-2011.

Teaching Responsibilities at Rocky Mountain University of Health Professions

OS604 Regional Intensive; Lower Leg, Ankle and Foot. 2012-2013.

6. MEMBERSHIPS - SCIENTIFIC, PROFESSIONAL

American Physical Therapy Association
Virginia Physical Therapy Association
North Carolina Physical Therapy Association
Sports Physical Therapy Section, American Physical Therapy Association
Orthopedic Section, American Physical Therapy Association
American Society of Biomechanics
American College of Sports Medicine
Southeast Chapter American College of Sports Medicine

7. SPECIAL AWARDS, FELLOWSHIPS AND OTHER HONORS

7.1 Awards

2016 Fellow of the American College of Sports Medicine. ACSM Fellows exhibit professional achievement and competence in the related disciplines of sports medicine via education, published works, professional practice and a demonstrated interest in and/or contribution to the goals of sports medicine. ACSM Fellows have demonstrated a high level of competence and ethical conduct with acceptable knowledge of the principles and practices of sports medicine.

2005 East Carolina University Scholar Teacher Award. This award is presented annually to recognize faculty members who effectively integrate research/creative activity in classroom teaching. The award winners excel in these two central facets of faculty responsibility. The recognition provides additional opportunities for these outstanding faculty members to mentor others.

2005 Enhancing Rehabilitation Research in the South. This is an annual competitive award offered by the National Institutes of Health (NIH-NICDH-NCMRR Grant #5 R24 HD039631) to attend the Intensive Workshop on Grant Writing, Preparation and Submission. The workshop is intended to assist participants in writing competitive grant to the NIH and other federal agencies.

2002 East Carolina University Laboratory Development Award. This is a recurring competitive award for funding to develop shared research space within the institution.

2000 East Carolina University Laboratory Development Award.
Development of Space for Movement Science Laboratory, \$10,000

1997 Promotion of Doctoral Studies I Scholarship. These are awarded annually by the Foundation for Physical Therapy and intend to fund post-professional doctoral students, who, having completed one full year of coursework, wish to continue their in their post-professional doctoral program.

7.2 Grants

7.2.1 Funded

Williams DS (PI) Impact of healthy aging on stiffness and inter-limb symmetry during running. (Funded by Center for Clinical and Translational Research-Virginia Commonwealth University. Individual Award. 2015-\$50,000)

Cistola DP (PI), Jones S, Williams DS (Co-I) Operation Re-Entry NC: A Research Initiative in Support of Military Personnel, Veterans and Families: Year 1, pilot project Sensory Re-weighting in Trauma- or Blast-Induced Dizziness. (Funded by U.S. Army Medical Research & Materiel Command, U.S. Department of Defense. 2011-\$90,000)

Williams, DS (PI), Steinbaker, CR, Segal, RL. Magnetic Resonance Analysis of Intrinsic Foot Musculature during Running. (Funded by 2011 North Carolina Translational and Clinical Sciences Institute-2011-2KR211004-\$2000)

2009-11

Gross-McMillan (PI) Williams, DS (Co-I) Effects of Resistance Training on Muscle Strength and Movement Characteristics in Adolescents who are Overweight (Funded by American Physical Therapy Association Section on Pediatrics, Clinical Research Grant. 2009-\$9,928)

Williams DS Diabetic Neuropathy Impairs Shock Attenuation through Changes in Lower Extremity Kinetics and Kinematics during Walking (Funded by East Carolina University SAHS Faculty Research Award. 2003-\$12,000)

Williams DS Lower Extremity Mechanics and Foot Arch Structure in Individuals with Diabetic Neuropathy (Funded by East Carolina University Division of Research and Graduate Studies. 2000-\$10,000)

7.2.2 Pending

Queen RM (PI), Pieper C, Williams DS (Co-I) Reduction of Risk Factors for ACL Re-injuries using a Novel Biofeedback Approach (Submitted to the National Institute of Arthritis and Musculoskeletal and Skin Diseases. 2015- NIH PAR14-192 R21-\$407,482). I will provide expertise on clinical intervention and clinically-relevant outcome measures to be evaluated (symmetry and nonlinear measures of variability).

7.2.3 Unfunded

Yeo WH (PI), Pidcoe P, Williams DS (co-PI). Wireless Skin-Like Electronics for Movement and Balance Assessment in the Elderly. (Submitted to: National Institutes of Health-National Institute of Biomedical Imaging and Bioengineering. 2015- NIH PAR-14-119 R21- \$250,000).

Williams DS (PI), Yeo WH, Pidcoe P, Reliability and validity of a human movement monitoring system: applications for assessment of dynamic postural sway in healthy and concussed individuals. (Submitted to: Center for Clinical and Translational Research-Virginia Commonwealth University. Multischool Award. 2014-\$130,000)

Powell DW (PI), Williams DS (Co-PI) Development of a mobile, objective assessment system for the detection of sport-related concussion. (Submitted to: GE NFL Head Health Challenge II. 2014- \$450,000).

Williams DS (PI), Marshall L, Woolman M. The Art and Science of Human Movement. (Submitted to: Quest Innovation Fund- Virginia Commonwealth University, 2013-\$50,000)

Ramsdell HL (PI), Williams DS (co-PI) Building a model of orofacial movement patterns in vocal development. (Submitted to: National Institutes of Health-Eunice Kennedy Shriver National Institute of Child Health and Human Development Academic Research Enhancement Award R15.-2011- \$300,000)

Williams, DS (PI) Effects of aging on interlimb and intralimb mechanics during running (Submitted to: National Institutes of Health-National Institute of Aging 1R15AG035254-01-2010-\$215,250).

Knudsen W (PI) Williams DS (Co-I) Soluble CD44 ectodomain as a new biomarker for early osteoarthritis (Submitted to: National Institutes of Health-National Institute of Aging-2009-\$200,000)

Williams DS (PI) Three-dimensional Rearfoot Kinematics and Kinetics in Individuals with Diabetic Neuropathy (Submitted to: American Diabetes Association Junior Faculty Award-2002-\$405,569)

Williams DS (PI), Jenkins WL, DeVita P The Effect of Custom-molded Foot Orthoses on the Frontal Plane Knee Moment during Level Walking and Stair Ascent in Individuals with Knee Osteoarthritis (Submitted to: Pauline Marshall Research and Education Fund-2001-\$35,000)

7.3 Invited Seminars and Lectures

American Medical Society for Sports Medicine ACSM Exchange Lecture. The Roles of Gender and Maturation on Running – Mechanics, Injury Incidence, Neuromuscular Control and Rehabilitation. 2016

APTA Combined Sections Meeting, Anaheim, CA. Educational Session. Science Meets Practice. Running. Moderator and Speaker. 2016

APTA Combined Sections Meeting, Anaheim, CA. Educational Session. Running On All 4 Cylinders: Factors to Consider in Return-to-Run Decisions. 2016

APTA Sports Section Team Concepts Conference Las Vegas, NV. Treatment of Tendinopathy in Runners. 2015

APTA Sports Section Team Concepts Conference Las Vegas, NV. Shoe wear and Orthotics in Runners. 2015

Florida International University. Commencement address and grand rounds. Current Concepts in Running Analysis: Symmetry and Regularity of Movement. 2015

American Society of Biomechanics Annual Meeting, Columbus, OH
Featured Symposium. Clinical Interventions for Gait Abnormalities: Mode of Feedback and Lower Extremity Mechanical Effects. 2015

Southeast Chapter of ACSM Annual Meeting, Jacksonville, FL. Tutorial Lecture. Entropic Measures of Variability in Gait and Posture. 2015

APTA Combined Sections Meeting, Indianapolis, IN. Pre-Conference. Males are from Mars, Females are from Venus: The Roles of Gender & Maturation on Running: Mechanics, Injury Incidence, Neuromuscular Control, and Rehabilitation. 2015

APTA Sports Section Team Concepts Conference Las Vegas, NV. Lower Leg Injuries: Equipment. Foot Orthoses and Training Considerations. 2014

APTA Sports Section Team Concepts Conference Las Vegas, NV. Therapeutic Interventions for the Foot and Ankle. 2014

APTA Sports Section Team Concepts Conference Las Vegas, NV. Examination for Runner's Injuries, 2014

VCU Department of Physical Therapy, Richmond, VA. VCU PT Lecture Series to Benefit the Miami-Marquette Challenge. Running Around in Circles: Pitfalls and Pearls in the Evaluation and Treatment of Runners. 2014

Oklahoma University Health Sciences Center, Oklahoma City, OK. Annual Joe Johnson Lecture for Allied Health Sciences: Coordination, Coupling and Control in Human Running: Implications for Injury and Performance. 2014

American College of Sports Medicine Annual Meeting, Orlando, FL. Tutorial Lecture: Variability in Biomechanical Systems. 2014

APTA Combined Sections Meeting, Las Vegas, NV. Run a Mile in my Shoes: Running Shoe Recommendations for Patients. 2014

APTA Combined Sections Meeting, Las Vegas, NV. Taking the Run Out of Running: Cross-Training and Fitness for the Runner. 2014

APTA Combined Sections Meeting, Las Vegas, NV. Establishing a Running Clinic: More Than a Treadmill and a Camera. 2014

APTA Sports Section Team Concepts Conference Las Vegas, NV. Current Concepts in Treatment of Tendinopathy: Lower Extremity: Achilles and Patellar Tendon, IT Band. 2013

APTA Sports Section Team Concepts Conference Las Vegas, NV. Clinical Decisions for Athletic Shoes and Foot Orthotic Devices. 2013

APTA Sports Section Team Concepts Conference Las Vegas, NV. Examination of the Foot in Running and Jumping Athletes. 2013

NCPTA Fall Meeting, Asheville, NC. Rehabilitation for Runners: everything but the Kitchen Sink including Clinical Exam, Basic Biomechanics, Gait Retraining and Functional Retraining. 2013

Twin Cities Sports Medicine Conference, Minneapolis, MN. Running in Circles: Challenging Cases in Runners: Differential Diagnosis of Heel Pain in a Runner. 2013

Twin Cities Sports Medicine Conference, Minneapolis, MN. Biomechanics and Treatment of Running Injuries in Aging Runners. 2013

Twin Cities Sports Medicine Conference, Minneapolis, MN. Biomechanics and Treatment of Running Injuries in Adolescent Female Athletes. 2013

APTA Combined Sections Meeting, San Diego, CA. The Female Runner Throughout the Lifespan. 2013

APTA Sports Section Team Concepts Conference Las Vegas, NV. Evaluation and Treatment of the Runner: What can I do in an Hour? 2012

APTA Sports Section Team Concepts Conference Las Vegas, NV. Biomechanical Examination of the Foot. 2012

APTA Combined Sections Meeting, Chicago, IL. Footwear and Orthotics for the Runner: Injury Prevention? 2012

APTA Sports Section Team Concepts Conference Las Vegas, NV. Clinical Examination of the Runner for Injury and Performance. 2011

APTA Sports Section Team Concepts Conference Las Vegas, NV. Lower Kinetic Chain Dysfunction in a Collegiate Dancer. 2011

APTA Sports Section Team Concepts Conference Las Vegas, NV. Post op management of ankle instability. 2011

Pedorthic Association of Canada, Ottawa, CA. Treatment and Training Considerations for the Aging Runner. 2011

Pedorthic Association of Canada, Ottawa, CA. Clinical Examination of the Runner for Injury and Performance. 2011

APTA Combined Sections Meeting, New Orleans, LA. A Multidisciplinary Approach to the Management of Children and Adolescents who are Obese and Overweight. 2011

American Society of Biomechanics, South Central Chapter, Dallas, TX. Alex Stacoff Lecture "Complexities in Measuring Running Mechanics. 2010

APTA Combined Sections Meeting, San Diego, CA. Keeping the Feet on the Road: Prevention and Treatment of Common Running Injuries-Considerations for the Older Runner. 2010

PFOLA Meeting, Atlanta, GA. Frontal Plane Hip and Knee Moment in Runners with a Lateral Thrust at the Knee, 2009

PFOLA Meeting, Vancouver, BC. Relationship between Arch Stiffness and Lower Extremity Joint Stiffness during Gait in Individuals with Diabetes. 2008

PFOLA Meeting, Vancouver, BC. Lower Extremity Stiffness and Loading Rate in Aging Runners. 2008

PFOLA Meeting, San Diego, CA. Changes in Lower Extremity Stiffness during Gait in Individuals with Diabetic Neuropathy. 2007

PFOLA Meeting, San Diego, CA. The Use of Foot Orthotic Devices to Control Frontal Plane Joint Torques in the Lower Extremities 2007

American College of Sports Medicine Meeting, Denver, CO. Symposium Chair and presenter: Gait Adaptations Related to Pathology and Injury Throughout the Lifespan. 2006

APTA Combined Sections Meeting, New Orleans, LA. Mechanical Shoulder Injuries in 2 College Dancers. 2005

APTA Combined Sections Meeting, Nashville, TN. Secondary Plane Hip Control in a Female Recreational Runner. 2004

American College of Sports Medicine Meeting, San Francisco, CA. Minisymposium Chair and presenter: Clinical and Biomechanical Efficacy of Foot Orthoses

APTA Combined Sections Meeting, Tampa, FL. Bilateral Plantar Fasciitis in a Division I Basketball Player. 2003

APTA Combined Sections Meeting, Boston, MA. Lower Kinetic Chain Dysfunction in a Female Dancer. 2002

East Carolina University Department of Exercise and Sport Science. Biomechanical Causes of Running Injuries. 2001

APTA Combined Sections Meeting, San Antonio, TX. Biomechanics and Pathomechanics of Running Injuries. 2001

NCPTA Fall Conference, New Bern, NC. Lower Extremity Stiffness in Runners with Different Foot Types. 2000

Temple University School of Podiatric Medicine. Biomechanics of Forefoot/Rearfoot Strike Patterns in Running. 1998

8. MAJOR COMMITTEES

8.1 School

Advanced Graduate and Research Committee
Department of Physical Therapy
Virginia Commonwealth University
2013-present

Professional Curriculum Committee
Department of Physical Therapy
Virginia Commonwealth University
2013-present

Planning Committee
Sports Residency Program
Department of Physical Therapy
Virginia Commonwealth University
2014-present

Building Committee
Department of Physical Therapy
East Carolina University
2000-2002

Curriculum Committee
Department of Physical Therapy

East Carolina University
2000-2012

Personnel Committee
Department of Physical Therapy
East Carolina University
2000-2012

Graduate Curriculum Committee
College of Allied Health Sciences
East Carolina University
2002-2004

Chair: Graduate Curriculum Committee
College of Allied Health Sciences
East Carolina University
2003-2004

Graduate Research Committee
College of Allied Health Sciences
East Carolina University
2002-2004

8.2 University

Steering Committee
Neuro-Orthopedic Center
VCU Health
2014-present

Sports Performance Team
VCU Athletics
2013-present

Faculty Marshall
East Carolina University
2011-2012

Faculty Senator
East Carolina University
2010-2012

Educational policies and Planning Committee
East Carolina University
2010-2012

Teaching Grants Committee
East Carolina University
2003-2007 (2004- Vice Chair, 2005- Chair)

AHEC Course Instructor
East Carolina University
2001-2005

8.3 State

Maryland State Representative for Government Affairs
Sports Section of American Physical Therapy Association
1999-2000

8.4 National

American Physical Therapy Association
Sports Physical Therapy Section
Vice President
2015-present

American Society of Biomechanics
Awards Committee
2015-present

American Physical Therapy Association
Orthopaedics Section
Foot and Ankle Special Interest Group
2000-present

American Physical Therapy Association
Sports Section
Running Special Interest Group 2012-present
Founding Chair 2012-2015

American College of Sports Medicine
Biomechanics Interest Group Executive Member 2003-2006
Biomechanics Interest Group Chair 2005-2006

American College of Sports Medicine
Lecturer, Health and Fitness Instructor Workshop

2001-2004

9. OTHER SIGNIFICANT SCHOLARLY, RESEARCH OR ADMINISTRATIVE EXPERIENCE

9.1 Professional Editorial and Grant Review Activities

Editorial Boards

Journal of Applied Biomechanics

Journal of Orthopedic and Sports Physical Therapy

Manuscript Reviewer

Medicine and Science in Sports and Exercise

Journal of Sport Biomechanics

Journal of Applied Biomechanics

Physical Therapy in Sport

Research Quarterly for Exercise and Sport

Journal of Athletic Training

Pediatric Exercise Science

Clinical Biomechanics

Journal of Biomechanics

Journal of Applied Physiology

Diabetic Medicine

9.2 Master's Thesis Committees

Chairperson for:

James A. Zambardino-The Relationship between Lower Extremity Biomechanics and Achilles Tendonitis in Runners. 2002

Committee Member for:

Alexis Sidiropoulos-Control of Walking Speed in Young and Old Adults. 2012

Allison H. Gruber-Effect of Age and Speed on Mechanical Plasticity in Level Walking. 2007

Joseph L. Helseth-Influence of Relatively Low Horizontal Reaction Forces on Joint Torques during Locomotion. 2005

Brandon R. Noyes-Neuromuscular Reorganization during Ascent and Descent Ramp Walking in Older Adults. 2004

Lena M. Westerkamp-Neuromuscular Functioning in the Osteoarthritic Population. 2003

Jovita K. Jolla-Aging Causes a Reorganization of Neuromuscular Function During Activities of Daily Living. 2002

Rachna Gupta- Lower Extremity Mechanics behind Successful Orthotic Intervention in Patients with Anterior Knee Pain. 2002

9.3 Doctoral Dissertation Committees

Chairperson for:

Yongung Kwon- The Effect of Rest Intervals on Performance, Neuromuscular Function, Postural Control and Biomechanics during the Star Excursion Balance Test Associated with Chronic Ankle Instability. VCU 2015

Committee Member for:

Brett A. Windsor-The Relationship between Measures of Foot Structure and Lower Extremity Dynamic Joint Stiffness during the Braking Phase of Shod Running. RMUHP 2016 (in progress)

B. J. Lehecka-Gluteal endurance measures (GEMs): Clinical targets for testing and training. RMUHP 2016 (in progress)

Timothy G. Coffey- Examination of Lower Extremity Mechanics during Three Landing Tasks and Injury Prediction Ability of Those Models as Compared to a Functional Test. VCU 2015

Lace Luedke-Relationships between Step Rate and Risk of Anterior Knee and Shin Injuries in High School Cross Country Runners. RMUHP 2015

Walter L. Jenkins- ACL Injury in the Female and Male Athlete: The Relationship between Static Posture and Injury. University of Indianapolis 2002

10. BIBLIOGRAPHY

10.1 Published Peer Reviewed Papers

Papers in Review

1. Luedke LE, Heiderscheit BC, **Williams DS** and Rauh MJ. (2016) "Factors Associated with Self-Selected Step Rate in High School Cross Country Runners" Phys Ther Sport.
2. Morgan J, Franco RL Blanks AM, Caslin HL, Patterson VT, Schwartz CS and **Williams DS**. (2016) "Lower Extremity Stiffness and Submaximal Oxygen Consumption in Recreational Runners." J Sports Sci
3. Kwon Y and **Williams DS**. (2016) "The Effect of Variable Rest Intervals and Chronic Ankle Instability on Triplanar Ankle Motion during Performance of the Star Excursion Balance Test" Hum Mov Sci

4. Kwon Y and **Williams DS**. (2016) "Effects of Volitional Exhaustion on Localized Ankle Plantarflexor and Dorsiflexor Muscle Activation and Torque" *Eur J Appl Phys*
5. **Williams, D.S.**, Cole, J.H., Powell, D.W. (2016) "Lower extremity joint work during acceleration, deceleration and steady state running" *J Appl Biomech*
6. Powell, D.W., Queen, R.M., **Williams, D.S.** (2016) "Arch structure is associated with unique absolute and relative joint work contributions to load attenuation during landing" *Hum Move Sci*
7. Powell, D.W., Andrews, S., Windsor, B.A., Stickley, C, **Williams, D.S.** (2016) "High- compared to low-arched athletes exhibit distinct frontal plane knee moments in walking and running" *Hum Move Sci*
8. Powell, D.W., **Williams, D.S.** (2016) "Changes in vertical and joint stiffness in runners with advancing age" *Journal of Aging & Physical Activity*

Papers in Print and Press

1. Newman GR, Gillis R, Hobbs T. and **Williams DS** (2016) "Greenville Early Mobility Scale© (GEMS): A Tool for Nurses to Improve the Mobilization of Hospitalized Patients" *J Acute Care Phys Ther.* 7:37–43
2. **Williams DS**, Murray NG and Powell DW. (2016) Athletes that train on unstable compared to stable surfaces exhibit unique postural control strategies in response to balance perturbations. *J Sport Health Sci.* 5:70–76.
3. Luedke LE, Heiderscheit BC, **Williams DS** and Rauh MJ. (2016) "Step Rate and Risk of Shin Injury and Anterior Knee Pain in High School Cross Country Runners." *Med Sci Sports Exerc.* Epub ahead of press.
4. Jenkins WL, **Williams DS**, Williams K, Hefner J and Welch H (2016) "Frontal plane knee kinematics during a functional single-leg landing differ between females and males" *Phys Ther Sport* (accepted)
5. Luedke LE, Heiderscheit BC, **Williams DS** and Rauh MJ. (2015) "Association of Isometric Strength of Hip and Knee Muscles With Injury Risk in High School Cross Country Runners". *Int J Sport Phys Ther.* 10: 868-76.
6. **Williams DS** and Welch LM. (2015) "Male and female runners demonstrate different sagittal plane mechanics as a function of static hamstring flexibility" *Braz J Phys Ther* 19:421-8.

7. Kline, PW and **Williams, DS**. (2015) "Effects of Sex and Age on Lower Extremity Kinetics and Joint Coupling During Running". *Int J Sports Phys Ther*, 10: 901-9.
8. Powell, D.W. and **Williams, D.S**. (2015) "Effect of opposing postural feedback paradigms on traditional and nonlinear measures of postural stability". *Human Movement Science*, 44:73-80.
9. **Williams D. S.**, Tierney R. N, and Butler, RJ (2014) Increased Medial Longitudinal Arch Mobility, Lower Extremity Kinematics, and Ground Reaction Forces in High-Arched Runners. *J Athl Train.*, 49:290-6.
10. Powell D., **Williams D.S**. 3rd, Windsor B.A., Butler R.J and Zhang, S. (2014) Dynamic stiffness of the ankle is greater in high- compared to low-arched athletes during barefoot running. *Human Movement Science*, 34:147-156.
11. Willson JD, Bjorhus JS, **Williams B 3rd**, Butler RJ, Porcari JP, Kernozek TW. (2013) "Short-Term Changes in Running Mechanics and Foot Strike Pattern After Introduction to Minimalistic Footwear" *PM R*. 6:34-43.
12. Powell D., **Williams D.S**. and Butler, R. J. (2013) A comparison of two multi-segment foot models in high- and low-arched athletes. *Journal of American Podiatric Medical Association*, 103:99-105.
13. **Williams, DS**, Wurzinger, B and Green, D. (2012) "Changes in Lower Extremity Movement and Power Absorption during Forefoot Striking and Barefoot Running" *Int J Sports Phys Ther* 7, 525-32.
14. Powell, DW; Hanson, NJ, Long, B and **Williams, DS**. (2012) "Frontal plane landing mechanics in high-arched compared with low-arched female athletes" *Clin J Sports Med* 22, 430-435.
15. Slayton S, **Williams DS** and Newman GR. (2012) "Physical Therapy Services Utilization and Length of Stay for Obese Patients Following Traumatic Leg Fracture" *NC Medical Journal* 73, 24-28.
16. **Williams, D. S**. and Isom, W (2012). "Decreased Frontal Plane Hip Joint Moments in Runners with Excessive Varus Excursion at the Knee." *J Appl Biomech*, 28, 120-126.
17. Jenkins WL, **Williams DS**, Bevil B, Stanley S, Blemker M, Taylor D, O'Brien, K (2011) "Gender and foot orthotic device effect on frontal plane hip motion during landing from a vertical jump" *J Appl Biomech* 27, 130-6.

18. McMillan AG, Pulver AM, Collier DN, **Williams DS** (2010). "Sagittal and frontal plane joint mechanics throughout the stance phase of walking in adolescents who are obese." *Gait Posture*. 32:263-8
19. McMillan, A.G., Phillips, K.A., Collier, D.N. and **Williams, DS Blaise**. (2010). "Frontal and sagittal plane biomechanics during drop jump landing in boys who are obese." *Pediatr Phys Ther*. 22:34-41.
20. Jenkins, W L., **Williams, D. S.**, Durland, A. N., Adams, B. and O'Brien, K (2009) "Foot orthotic devices decrease transverse plane motion during landing from a forward vertical jump in healthy females" *J Appl Biomech* 25: 387-95.
21. McMillan AG, Auman NL, Collier DN and **Williams DSB**. (2009) "Frontal plane lower extremity biomechanics during walking in boys who are overweight versus healthy weight." *Pediatr Phys Ther*. 21: 187-193.
22. **Williams, D. S.**, Banning, V. A. and Zambardino, J. A.. (2008) "Transverse-Plane Mechanics at the Knee and Tibia in Runners With and Without a History of Achilles Tendonopathy" *J Ortop Sports Phys Ther* 38: 761-767
23. Jenkins WL, Raedeke S, **Williams DS**. (2008) "The Relationship between Anterior Cruciate Ligament injury and the Utilization of Foot Orthotics" *J Am Pod Med Assn* 98:207-211.
24. **Williams, D.S.**, Brunt, D. and Tanenberg, R. J. (2007) "Diabetic Neuropathy is Related to Changes in Joint Stiffness during the Stance Phase of Gait" *J Applied Biomechanics* 23:251-260.
25. Jenkins, W. L., Killian, C., **Williams, D. S.**, Loudon, J., and Raedeke, S. (2007) "Anterior Cruciate Ligament Injury in the Female and Male Athlete: The Relationship Between Lower Extremity Structure and Injury" *J Am Pod Med Assn*;97:371-376.
26. P Fiolkowski, P., Bishop, M., Brunt, D. and **Williams, D. S.** (2005) "Plantar feedback contributes to the regulation of leg stiffness" *Clin Biomech* 20: 952-958.
27. Ferber, R; McClay Davis, I. S.; and **Williams, D. S.** (2005) "Effect of Foot Orthotics on Rearfoot and Tibia Joint Coupling Patterns and Variability" *J Biomech* 38: 477-83.

28. **Williams D. S.**; McClay, I. S.; Scholz, J. P.; Hamill J. and Buchanan, T. S. (2004) "High-arched Runners Exhibit Increased Leg Stiffness Compared to Low-arched Runners" *Gait and Posture*. 19: 263-269.
29. **Williams, D. S.**, Davis, I. S. and Baitch S. P. (2003) "Effect of the Inverted Orthosis on Lower Extremity Mechanics in Runners" *Med Sci Sports Exerc* 35:2060-8.
30. Ferber, R., McClay Davis, I., and **Williams III, D.S.** (2003). "Gender differences in lower extremity mechanics during running." *Clinical Biomechanics* 18: 350-7.
31. Ferber, R.; McClay Davis, I.; **Williams, D.S.**; and Laughton, C. (2002) "A Comparison of Within and Between-day Reliability of Discrete 3-D Lower extremity Variables in Runners." *J Orthop Res* 20: 1139-1145.
32. Laughton, C. A.; McClay, I. S. and **Williams, D. S.** (2002) "A Comparison of Three Different Methods of Obtaining a Negative Impression of the Foot." *J Am Podiatric Med Assoc* 92: 261-268.
33. **Williams, D.S.**; McClay, I. S., and Hamill, J. (2001) "Arch Structure and Injury Patterns in Runners" *Clin Biomech*, 16: 341-347.
34. **Williams, D. S.**; McClay, I. S.; Hamill, J., and Buchanan T. S. (2001) "Lower Extremity Kinematic and Kinetic Differences in Runners with High and Low Arches." *J Appl Biomechanics*, 17: 153-163.
35. **Williams, D.S.**; McClay, I.S. and Manal, K.T. (2000) "Lower Extremity Mechanics in Runners with a Converted Forefoot Strike Pattern." *J Applied Biomechanics*, 16: 210-218.
36. **Williams, D.S.** and McClay, I.S. (2000) "Measurements Used to Characterize the Foot and the Medial Longitudinal Arch: Reliability and Validity." *Phys Ther.* 80: 864-871.

10.3 Published Abstracts

1. Morgan J, Franco RL, Harrison K, Blanks AM, Caslin HL and **Williams DS.** Stride Frequency And Injury Rates In Recreational Runners Training For A Half-marathon. ACSM 63rd Annual Meeting, Boston, MA. 2016.
2. Kwon Y and **Williams DS.** Ankle Instability and Rest Intervals Impact Muscle Activation and Lower Extremity Kinematics during the SEBT. ACSM 63rd Annual Meeting, Boston, MA. 2016.

3. Powell DW, Easley JL, Mize MA, Plummer RN, Windsor BA, Queen RM and **Williams DS**. Absolute And Relative Joint Contributions To Landing In High-Compared To Low-Arched Athletes. ACSM 63rd Annual Meeting, Boston, MA. 2016.
4. Windsor BA, Easley JA, Plummer RN, Mize MA, Queen RM, **Williams DS** and Powell DW. High-Arched Athletes Exhibit Significantly Greater Vertical Stiffness Values Than Low-Arched Athletes During A Landing Task. ACSM 63rd Annual Meeting, Boston, MA. 2016.
5. Harrison K, Miller E, Pidcoe P, Morgan J and **Williams DS**. Effects of Training with a Modified Elliptical Trainer on Lower Extremity Mechanics during Running. ACSM 63rd Annual Meeting, Boston, MA. 2016.
1. Queen R, Merenda E, Powell D, Williams DS. Using Sample Entropy on Continuous and Discontinuous Data to Assess Jumping and Landing. American Society of Biomechanics Annual Meeting, Columbus OH 2015.
2. Y Kwon, DS Williams. Impact of Gender on Ankle Plantar and Dorsiflexor Fatigue during the Bruce Treadmill Protocol. ACSM 62nd Annual Meeting, San Diego, CA. 2015.
3. DW Powell, DS Williams. Training Status Alters Entropic Measures of Postural Stability. ACSM 62nd Annual Meeting, San Diego, CA. 2015.
4. RN Verghis, RL Franco, MG Browning, HL Caslin, EB Crabb, DS Williams. Oxygen On-kinetics During Progressive Exercise in Men and Women: Influence of Fitness and Fatness. ACSM 62nd Annual Meeting, San Diego, CA. 2015.
5. KM Ake, DW Powell, DS Williams. Aged Compared to Young Runners Exhibit Unique Lower Extremity Biomechanics. ACSM 62nd Annual Meeting, San Diego, CA. 2015.
6. J Morgan, DS Williams. The Effects of Modified Arm Swings on Hip Extension Angle, Moment and Power during Running. ACSM 62nd Annual Meeting, San Diego, CA. 2015.
7. E. P. Merenda, D. S. Williams, A. L. Carpenter, R. M. Queen. Movement Repeatability During Landing Following Anterior Cruciate Ligament Reconstruction. 12th Annual Human Movement Science Curriculum Research Symposium, Chapel-Hill, NC, 2015.

8. C. Scruggs, DW Powell, C Schneider, D.S. Williams. Advancing Age is Associated with Smaller Ankle and Knee Joint Stiffness in Running. Southeast Chapter of ACSM Meeting, Jacksonville, FL, 2015.
9. M.E. Holman, J. Morgan, D.S. Williams. Adherence to a 16-Week Training Program for a Half-Marathon among Recreational Runners: Effects of 2 Training Protocols. Southeast Chapter of ACSM Meeting, Jacksonville, FL, 2015.
10. J.A. Morgan, C.S. Schwartz, V.T. Patterson, R.L. Franco, D.S. Williams. Lower Extremity Stiffness Influences Running Performance in Recreational Runners. Southeast Chapter of ACSM Meeting, Jacksonville, FL, 2015.
11. Williams DS, Powell DW Variability of Sway in Athletes Utilizing Different Training Paradigms. APTA Combined Sections Meeting, Indianapolis, IN, 2015.
12. Williams, D.S. & Powell, D.W. Effects of age on variability of frontal plane knee motion in runners. 38th Annual Meeting of the American Society of Biomechanics, Boston, Massachusetts, 2014.
13. Ake, K.M., Williams, D.S., Reed-Jones, R.J., Dedrick, G., Windsor, B.A., Sawyer, S., Powell, D.W. Correlation of approximate entropy values calculated from a Wii Balance Board and a mobile-device mounted accelerometer. 38th Annual Meeting of the American Society of Biomechanics, Boston, Massachusetts, 2014.
14. Scruggs, C.E., Willson, J.D., Ake, K.M., Williams, D.S., Windsor, B.A., Powell, D.W. Effect of increasing treadmill velocity on vertical ground reaction force variability. 38th Annual Meeting of the American Society of Biomechanics, Boston, Massachusetts, 2014.
15. Powell, D.W., Scruggs, C.E., Windsor, B.A., Williams, D.S. Effect of training paradigm on traditional measures of postural stability in response to positive- and negative-feedback surface perturbations. 38th Annual Meeting of the American Society of Biomechanics, Boston, Massachusetts, 2014.
16. Kwon, Y, Williams, D. S. Arnold, B. The Effect of Different Rest Intervals on Ankle Muscle Fatigue and Performance During the Star Excursion Balance Test, 65th Clinical Symposia of the National Athletic Trainers Association, Indianapolis, IN, 2014.
17. Powell, D.W., Williams, D.S. 3rd, Scruggs, C.E., Willson, J.D. Effect of gender and increasing treadmill velocity on peak ankle plantarflexor powers in

females compared to males during level walking. 61st Annual Meeting of the American College of Sports Medicine, Orlando, Florida, 2014.

18. Scruggs, C.E., Willson, J.D., Williams, D.S. 3rd, Powell, D.W. Changes in regularity of center of mass motion with increasing mechanical demand. 61st Annual Meeting of the American College of Sports Medicine, Orlando, Florida, 2014.

19. Schneider, C.A., Williams, D.S. 3rd, Windsor, B.A., Zhang, S., Powell, D.W. Differences in ankle joint reaction forces in forefoot compared to rearfoot strike patterns in running. 61st Annual Meeting of the American College of Sports Medicine, Orlando, Florida, 2014.

20. Windsor, B.A., Williams, D.S. 3rd, Zhang, S., Powell, D.W. High- compared to low-arched athletes exhibit longer ankle moment arms during level running. 61st Annual Meeting of the American College of Sports Medicine, Orlando, Florida, 2014.

21. Murray, N.G., Scruggs, C.E., Willson, J.D., Williams, D.S. 3rd, Powell, D.W. Comparison of linear and nonlinear measures of postural stability. 61st Annual Meeting of the American College of Sports Medicine, Orlando, Florida, 2014.

22. Williams, D.S. 3rd, Willson, J.D., Powell, D.W. Effect of temporal normalization on nonlinear measures of variability in level walking. 61st Annual Meeting of the American College of Sports Medicine, Orlando, Florida, 2014.

23. Reed-Jones, R.J., Scruggs, C.E., Williams, D.S. 3rd, Willson, J.D., Powell, D.W. Altered variability of joint motion with increasing gait velocity. 61st Annual Meeting of the American College of Sports Medicine, Orlando, Florida, 2014.

24. Ake, K.M., Williams, D.S., Reed-Jones, R.J., Powell, D.W. Correlation of traditional and nonlinear measures of postural stability using a Nintendo Wii Balance Board. 11th Annual Human Movement Science Curriculum Research Symposium, Chapel-Hill, NC, Feb 21, 2014.

25. Fox, J.R., Windsor, B.A., Williams, D.S., Dedrick, G.S., Powell, D.W. High-arched athletes demonstrate longer foot-ankle moment arms during level running. 11th Annual Human Movement Science Curriculum Research Symposium, Chapel-Hill, NC, Feb 21, 2014.

26. Powell, D.W., Scruggs, C.E., Windsor, B.A., Williams, D.S. Training paradigm is associated with unique postural responses to positive- and negative-

feedback surface perturbations. 11th Annual Human Movement Science Curriculum Research Symposium, Chapel-Hill, NC, Feb 21, 2014.

27. Schneider, C.A., Williams, D.S., Windsor, B.A., Powell, D.W. Footwear and strike pattern are associated with altered ankle shear forces during running. 11th Annual Human Movement Science Curriculum Research Symposium, Chapel-Hill, NC, Feb 21, 2014.

28. Williams DS, Powell DW Unstable Surface Training is Associated with Greater Center of Pressure Variability in Response to Balance Perturbations. APTA Combined Sections Meeting, Las Vegas, NV. February, 2014.

29. Powell DW, Williams DS. Greater Center of Pressure Excursions Associated with Negative-Feedback Balance Training. APTA Combined Sections Meeting, Las Vegas, NV. February, 2014.

30. Kline P, Williams D The effect of sex and age on lower extremity joint coupling and loading during running. APTA Combined Sections Meeting, Las Vegas, NV. February, 2014.

31. Gross McMillan A, Reinhard KE, Scott W, Williams D. Absolute and Relative Strength in Adolescents who are Overweight/Obese. APTA Combined Sections Meeting, Las Vegas, NV. February, 2014.

32. Gross McMillan A, DeJesus KE, Scott W, Williams D. Relationship of Plantarflexion Strength to Walking Gait Kinetics in Adolescents who are Overweight/obese. APTA Combined Sections Meeting, Las Vegas, NV. February, 2014.

33. Williams, D.S., Welch, L.M. and Turner, D. Effects of Six-Week Static and Dynamic Hamstring Stretching Protocols on Hamstring Flexibility and Lower Extremity Biomechanics, APTA Combined Sections Meeting, Las Vegas, NV. February, 2014.

34. Williams, D.S. and Powell, D. "Dynamic ankle stiffness and ankle work in high- compared to low-arched athletes during barefoot running". 37th Annual Meeting of the American Society of Biomechanics, Omaha, NE, Sept. 4-7, 2013.

35. Powell, D. and Williams, D.S. "Differences in center of pressure regularity in response to perturbation in positive- and negative-surface athletes" 37th Annual Meeting of the American Society of Biomechanics, Omaha, NE, Sept. 4-7, 2013.

36. Rider P, Beaman B, McKinney T, DeVita P and Williams DS. "Peak Vertical Ground Reaction Forces Are Different During Stretch Vs. Wind-up Pitching In Collegiate Baseball Players" 37th Annual Meeting of the American Society of Biomechanics, Omaha, NE, Sept. 4-7, 2013.
37. Powell DW, Williams DS, Butler RJ and Zhang S. "Significantly Greater Ankle Work in Low- Compared to High-Arched Athletes during Running" ACSM Annual Meeting, Indianapolis, IN May 2013.
38. Powell DW, Butler RJ and Williams DS. "Foot Type and Dynamic Ankle Stiffness During Barefoot Running" 10th Annual Human Movement Science Research Symposium, Chapel Hill, NC March 2013.
39. Newman GR, Gillis R, Bankert S and Williams DS. "How the Greenville Early Mobility Scale (GEMS ©) Helped to Improve the Culture of Mobility in an Acute Care Hospital" APTA Combined Sections Meeting, San Diego, CA January 2013.
40. Goodwin J and Williams DS. "Clinical predictive measurements of dynamic lower extremity stiffness during running" APTA Combined Sections Meeting, San Diego, CA January 2013.
41. Williams DS and Welch L. "Effect of static hamstring length on sagittal plane mechanics in male and female runners" APTA Combined Sections Meeting, San Diego, CA January 2013.
42. Williams DS, Ratcliff O, Butler RJ and Cole J. "Individual Lower Extremity Joint Contributions during Acceleration, Deceleration, and Steady State Runs " APTA Combined Sections Meeting, San Diego, CA January 2013.
43. Rossignol, D. , Williams, D.S. 3rd, Powell, D. Validation of the Foot-Arch Assessment System for arch height index values. 35th Annual Meeting of the Mid-Atlantic Regional Chapter of the American College of Sports Medicine. Harrisburg, PA, November 2012.
44. Williams DS, Wurzinger B, Ratcliff O, Segal R, Streinbaker R and Kline P. "Magnetic Resonance Analysis of Intrinsic Foot Musculature during Running in Shod and Barefoot Conditions" American College of Sports Medicine Meeting, San Francisco, CA June 2012.
45. Antal G, Allison L, Williams DS "In-phase and anti-phasic postural coordination modes during sensory re-weighting conditions" APTA Combined Sections Meeting, Chicago, IL February 2012.

46. Williams DS, Tierney R. "Effect of Arch Mobility on Loading Characteristics in High-Arched Runners" APTA Combined Sections Meeting, New Orleans, LA February 2011.
47. Williams DS, Green D, Wurzinger, B. "Lower Extremity Power Absorption is Reduced During Forefoot Striking and Barefoot Running" APTA Combined Sections Meeting, New Orleans, LA February 2011.
48. Gross McMillan A, Williams DS, White, M. "Three-dimensional lower extremity kinematics during drop landing in adolescent females who are obese." APTA Combined Sections Meeting, New Orleans, LA February 2011.
49. Powell, D., Williams, D.S. "A Comparison of Foot Motions in Two Multi-Segment Foot Models" 2nd Meeting of the International Foot and Ankle Biomechanics Community. Seattle, WA. September 2010.
50. Williams DS, Reed SC, Taylor, L. "Effect of Aging on Secondary Plane Symmetry of the Lower Extremities during Running." APTA Combined Sections Meeting, San Diego, CA February 2010.
51. Antonucci-Alter A, Brunt D, Williams D. "Posterior shank resistance modifies the biomechanics of sit to stand." International Society of Posture and Gait Research, Bologna, Italy, June 2009.
52. Williams DB, Simmerman RA, "Effects of Age on Lower Extremity Joint Stiffness and Loading Rates in Runners" APTA Combined Sections Meeting, Las Vegas, NV. February 2009.
53. McMillan, AG, Hunley, M, Huntingford, L, Pachner, M, Leggett, J, Collier, DN and Williams, DS "Spaciotemporal Gait parameters in Adolescent Females who are Overweight and Health Weight, and Effects of Weight Loss" APTA Combined Sections Meeting, Las Vegas, NV. February 2009.
54. Jenkins WL, Williams DS, Miller A, Shelton M, O'Brien K. "The effect of foot orthotic devices on hip joint kinematics during vertical jump in healthy female and male subjects" APTA Combined Sections Meeting, Las Vegas, NV. February 2009
55. Williams, DS, Banning, VA, Kidd, EA "Transverse Plane Biomechanics in Runners With and Without a History of Achilles Tendonitis." APTA Combined Sections Meeting, Nashville, TN. February 2008.

56. McMillan, A.G., Auman, N.L., Collier, D.N. and Williams, D.S. "Frontal Plane Biomechanics of the Lower Extremity during Walking in Boys Who Are Overweight versus Healthy Weight" APTA Combined Sections Meeting, Nashville, TN. February 2008.
57. Brunt, D. Williams, D. S., Stewart D.F., and Durland, A.N. "Kinematic and Kinetic Changes During Slow Sit to Stand" International Society of Posture and Gait Research, Burlington, VT. July 2007.
58. Williams, D. S. and Baucum, B. "Balance Differences Between Athletes Experiencing Positive and Negative Feedback " International Society of Posture and Gait Research, Burlington, VT. July 2007.
59. McMillan, A. G., Williams, D. S. and Collier, D. N. "Ground Reaction Forces in Boys Who are Overweight Versus Healthy Weight During Walking and Sit to Stand" APTA Combined Sections Meeting, Boston, MA. February 2007.
60. Jenkins, W. L., Williams, D. S. and Durland, A. N. "The effect of foot orthotic devices on hip joint kinematics during vertical jump in healthy females" APTA Combined Sections Meeting, Boston, MA. February 2007.
61. Williams, D.S., Brunt, D. and Tanenberg, R. J. "Diabetic Neuropathy is Related to Changes in Joint Stiffness during Late Stance Phase" American Society of Biomechanics, Blacksburg, VA. 2006.
62. Williams, D.S. "Static Measurements of the Medial Longitudinal Arch Are Predictive of Measurements During Walking" APTA Combined Sections Meeting, San Diego, CA. 2006.
63. Jenkins, W.L., Williams, D.S., Youngs, K.B. and Brunt, D. "Symmetry of Lower Extremity Kinematics in Healthy Individuals with Leg Length Discrepancies" APTA Combined Sections Meeting, San Diego, CA. 2006.
64. Williams, D.S., Brunt, D. and Tanenberg, R. J. "Diabetic Neuropathy is Related to Changes in Joint Stiffness during the Propulsive Phase of Gait" American Diabetes Association Scientific Sessions, San Diego, CA. 2005.
65. Williams, D. S., Koo, J. S., Maxwell, J. M. and Young, B. M. "Validity of a Dynamic Measurement of the Medial Longitudinal Arch" APTA Combined Sections Meeting, New Orleans, LA. 2005.

66. Williams, D.S. and Tanenberg, R. J. "Sensory Neuropathy is Related to Lower Extremity Stiffness in Individuals with Type 2 Diabetes." American Diabetes Association Scientific Sessions, Orlando, FL. 2004
67. Williams, D. S. and DeVita, P. "Variability in Lower Extremity Joint Coupling is Related to Achilles Tendonitis in Runners ." American College of Sports Medicine Meeting, Indianapolis, IN. 2004
68. Powell, D. W., Williams, D. S., Jenkins, W. L. and Koo, J. S. "Individuals With a Leg Length Discrepancy Demonstrate a Multi-Joint Mechanical Compensation" Southeast Regional Meeting of the American College of Sports Medicine, Atlanta, GA. 2004
69. Jenkins, W. L. and Williams, D. S. "The relationship between ACL injury in female basketball players and the utilization of foot orthotics" APTA Combined Sections Meeting, Nashville, TN 2004
70. Williams, D.S. and Tanenberg, R. J. "Dynamic ankle range of motion in the diabetic neuropathic population" APTA Combined Sections Meeting, Nashville, TN 2004
71. Zambardino, J. A., Williams, D. S. and DeVita, P. "The Relationship between Achilles Tendonitis in Runners and Transverse Plane Joint Coupling." American College of Sports Medicine Meeting, San Francisco, CA. 2003
72. Williams, D. S. "The Relationship between Sensory Neuropathy and Lower Extremity Mechanics." APTA Combined Sections Meeting, Tampa, FL. 2003.
73. Ferber, R; McClay Davis, I. S.; and Williams, D. S. "Orthotics Alter Lower Extremity Joint Coupling and Variability: A Dynamical Systems Approach." IV World Congress on Biomechanics, Calgary 2002.
74. Williams, D. S. and McClay, I. S. "Kinematics and Knee Injuries in Runners with Low Arches: Gender Differences." American College of Sports Medicine Meeting, St. Louis, MO. 2002.
75. Zambardino, J. A., Williams, D. S. and McClay, I.S. "Gender Affects Lower Extremity Kinetics in Runners with High Arches." American College of Sports Medicine Meeting, St. Louis, MO. 2002.

76. Williams D. S.; Hamill J. and McClay, I. S. "Continuous Relative Phase Patterns in Runners With Different Foot Types." APTA Combined Sections Meeting, San Antonio, TX. 2001.
77. Williams D. S.; McClay, I. S.; Scholz, J. P.; Hamill J. and Buchanan, T. S. "Lower Extremity Stiffness in Runners With Different Foot Types." ASB Annual Meeting, Chicago IL. 2000.
78. Williams, D.S. and McClay, I.S. "Injury Patterns in Runners with Pes Cavus and Pes Planus" American College of Sports Medicine Meeting, Indianapolis, IN. 2000.
79. Williams, D.S., Laughton, C.A. and McClay, I.S. "A Comparison of Kinematic Variables During Running Across Genders" APTA Combined Sections Meeting, New Orleans, LA. 2000.
80. McClay, I.S., Williams, D.S. and Laughton, C.A. "Can Gait be Retrained to Prevent Injury in Runners?" ASB Annual Meeting, Pittsburgh, PA. 1999.
81. Williams, D.S., McClay, I.S. and Laughton, C.A. "A Comparison of Between Day Reliability of Different Types of Lower Extremity Kinematic Variables in Runners" ASB Annual Meeting, Pittsburgh, PA. 1999.
82. McClay, I.S., Williams, D.S. and Baitch, S.P. "The Effect Of The Inverted Orthotic On Lower Extremity Mechanics" International Society of Biomechanics Meeting, Calgary, Alberta. 1999.
83. Laughton, C.A., McClay, I.S. and Williams, D.S. "A Comparison of Three Different Methods of Obtaining a Negative Impression of the Foot" APTA Annual Meeting, Washington, D.C. 1999.
84. Williams, D.S. and McClay, I.S. "Structure, Mechanics and Injury in Identical Twin Runners: A Case Study" American College of Sports Medicine Meeting, Seattle, WA. 1999.
85. Williams, D.S. and McClay, I.S. "Reliability and Validity of Medial Longitudinal Arch Measurements" APTA Combined Sections Meeting, Seattle WA. 1999.
86. McClay, I.S. and Williams, D.S. "Lower Extremity Mechanics in a Converted Forefoot Strike Pattern in Runners" NACOB, Waterloo, Ontario. 1998.

10.4 Books and Book Chapters

Rehabilitation of Leg, Ankle, and Foot Injuries in Pathology and Intervention in Musculoskeletal Rehabilitation, Second Edition edited by David J. Magee et al. eds. Elsevier, 2015

Orthopedic Management of the Ankle, Foot and Toes in Fundamental Orthopedic Management for the PTA, 4th edition, Manske, ed 2015

Foot, Ankle and Lower Leg Injuries in Runners in Home Study Course on Running, Sports Section of American Physical Therapy Association, Rob Manske, ed. 2012

Foot, ankle and lower leg in Physical Therapies in Sport and Exercise, 2nd edition, Kolt and Snyder-Mackler, eds. 2006