

# **Donovan Jones Lott, PT, PhD, CSCS**

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**(352) 273-9226**

## **EDUCATION:**

June 2007 – Sept 2008 Post Doctoral Fellowship (Muscle Physiology Laboratory)  
University of Florida, Gainesville, FL

Aug. 2002 – May 2007 Ph.D. in Movement Science (Emphasis in Biomechanics)  
Washington University in St. Louis, St. Louis, MO

Aug. 1996 – Dec. 1998 M.S. in Physical Therapy  
Washington University School of Medicine, St. Louis, MO

Aug. 1990 – April 1991 B.S. in Exercise Science (Magna Cum Laude)  
Jan. 1994 – Aug. 1996 Brigham Young University, Provo, UT

## **EMPLOYMENT:**

Sept 2008 – Present Department of Physical Therapy, University of Florida  
Gainesville, FL  
Research Assistant Professor

June 2007 – Sept 2008 Department of Physical Therapy, University of Florida  
Gainesville, FL  
Post Doctoral Fellow

June 2007 – Sept 2008 Fit For Life Physical Therapy  
Gainesville, FL  
Per diem Physical Therapist

Aug. 2002 – May 2007 BJC Homecare Services  
St. Louis, MO  
Per diem Physical Therapist

Jan. 2000 - Aug. 2002 Jack D. Close & Assoc. Physical Therapy and Rehabilitation Center  
Las Vegas, NV  
Director of Outpatient Physical Therapy Clinic

Feb. 1999 – Aug. 2002 IHS Rehabilitation  
Las Vegas, NV  
Per diem Physical Therapist

Feb. 1999 – Aug. 2002 Colonial Home-Care Services  
Las Vegas, NV  
Per diem Physical Therapist

Feb. 1999 – Dec. 1999 Jack D. Close & Assoc. Physical Therapy and Rehabilitation Center  
Las Vegas, NV  
Staff Physical Therapist

## **PROFESSIONAL ORGANIZATIONS:**

American Physical Therapy Association (APTA): 1997 – Present  
APTA Orthopaedic Section: 1999 – Present  
APTA Research Section: 2003 – Present  
American College of Sports Medicine (ACSM): 2009 - Present  
National Strength & Conditioning Association: 1998 – Present  
American Society of Biomechanics: 2005 - 2007

## **SERVICE:**

Department of Physical Therapy Faculty Representative for the University of Florida  
Undergraduate PT Club: June 2010 – Present  
Professional Team Member for entry-level DPT students, Department of Physical Therapy,  
University of Florida: Aug 2009 – Dec 2010  
Committee Member for “Darius at UF” (event to promote awareness of Duchenne muscular  
dystrophy): June – Sept, 2009  
Reviewer/Judge of abstracts submitted to the College of Public Health & Health Professions  
Research Day, University of Florida, 2009, 2010, 2011  
Reviewer for *Journal of Biomechanics*: 2009 - Present  
Reviewer for *Clinical Biomechanics*: 2008 - Present  
Reviewer for *Journal of Rehabilitation Research and Development*: 2007- Present  
Reviewer for *Journal of Applied Physiology*: 2006 – Present  
Reviewer for *Physical Therapy*: 2006 – Present  
Reviewer for *Journal of Diabetes and its Complications*: 2007- 2010

## **TEACHING EXPERIENCE:**

May '11 – May 2012 Mentor: Honors Thesis Research Project  
(Thesis for Undergraduate Honors Program)  
University of Florida, Public Health & Health Professions  
Providing mentorship and direction in the research project and manuscript  
preparation to be entitled.

Aug – Dec 2011 Supervisor: Independent Study  
(Course for Undergraduate student, HSC 4905)  
University of Florida, Bachelor of Health Science Program  
Provided direction to the creation and organization of materials to be used  
by the siblings of research participants.

Summer 2010, 2011 Instructor and Course Coordinator: Evidence Based Practice II  
(Class for entry-level Doctor of Physical Therapy [DPT] students)  
University of Florida, Department of Physical Therapy

Summer 2011 Supervisor: Independent Study  
(Course for PhD student, RSD 6905)  
University of Florida, Rehabilitation Science Doctoral Program  
Provided direction and instruction regarding classroom teaching and  
preparation of materials for lectures and learning.

Summer 2011 Instructor: Supervised Teaching  
(Course for PhD student, RSD 6940)  
University of Florida, Rehabilitation Science Doctoral Program  
Provided direction and instruction in principles and execution of teaching  
entry-level doctoral of physical therapy students.

- May '10 – May 2011 Mentor: Honors Thesis Research Project  
(Thesis for Undergraduate Honors Program)  
University of Florida, Public Health & Health Professions  
Providing mentorship and direction in the research project and manuscript preparation entitled, “Non-invasive Analysis of Muscle Quality in Patient with Duchenne Muscular Dystrophy”
- Jan '10 – May 2010 Mentor: Honors Student Independent Study Project  
University of Florida, Honors Program  
Providing mentorship and direction in the research project and abstract preparation entitled, “Assessment of Peroneal Muscle Size in Boys with Duchenne Muscular Dystrophy”
- May '09 – May 2010 Mentor: Honors Thesis Research Project  
(Thesis for Undergraduate Honors Program)  
University of Florida, Public Health & Health Professions  
Providing mentorship and direction in the research project and manuscript preparation entitled, “The Relationships between Muscle Composition, Strength, and Gait Function in Boys with Duchenne Muscular Dystrophy”
- May – June 2009 Co-teacher: Evidence Based Practice II  
(Class for entry-level Doctor of Physical Therapy [DPT] students)  
University of Florida, Department of Physical Therapy
- May '08 – May 2009 Mentor: Honors Thesis Research Project  
(Thesis for Undergraduate Honors Program)  
University of Florida, Public Health & Health Professions  
Providing mentorship and direction in the research project and manuscript preparation entitled, “Gait and Strength Changes in Boys with Duchenne Muscular Dystrophy”
- Jan - April 2009 Advisor: Evidence Based Practice III  
(Class for entry-level DPT students)  
University of Florida, Department of Physical Therapy  
Advised two 3<sup>rd</sup> year DPT students regarding their written case reports  
(Topics: Rehabilitation protocol after total knee arthroplasty; Aquatic therapy for a patient after tibial plateau fracture)
- March 2009  
March 2010 Lecturer: Exercise Physiology  
(Class for entry-level DPT students)  
University of Florida, Department of Physical Therapy  
Topic for two lectures: Diabetes and Exercise
- Aug. – Dec 2008 Supervisor: Independent Study  
(Course for PhD student)  
University of Florida, Rehabilitation Science Doctoral Program  
Provided direction and instruction in research laboratory experience emphasizing principles of MRI and methods for data analyses.
- Jan. – April 2007 Advisor: Case Integration 3  
(Class for entry-level DPT students)  
Washington University School of Medicine, Program in Physical Therapy

Advised a 3<sup>rd</sup> year DPT student regarding her written case report and structured literature review (Topic: Rehabilitation for proprioception and balance after an ankle sprain)

- February 2007      Lab Assistant: Kinesiology 2  
(Class for entry-level DPT students)  
Washington University School of Medicine, Program in Physical Therapy  
Topics for two labs: Quantitative and observational gait analysis
- January 2007      Lecturer: Human Anatomy  
(Class for entry-level DPT students)  
Washington University School of Medicine, Program in Physical Therapy  
Musculoskeletal system
- Sept. – Oct. 2006      Lecturer: Clinical Implications of Tissue Mechanics  
Sept. – Oct. 2004      (Class for post-professional DPT students)  
Washington University School of Medicine, Program in Physical Therapy  
Topics for three lectures: Material properties of biological tissues; Clinical applications using the Physical Stress Theory
- Feb. - March 2006      Lab Assistant: Kinesiology 2  
(Class for entry-level DPT students)  
Washington University School of Medicine, Program in Physical Therapy  
Topics for four labs: Quantitative and observational gait analysis; Clinical evaluation of the foot and ankle
- February 2006      Lecturer: Kinesiology 2  
(Class for entry-level DPT students)  
Washington University School of Medicine, Program in Physical Therapy  
Topic for lecture: Kinematics, kinetics, and moments of observational gait
- Jan. – Feb. 2006      Lecturer: Human Anatomy  
(Class for entry-level DPT students)  
Washington University School of Medicine, Program in Physical Therapy  
Topic for three lectures: Musculoskeletal system, abdominal musculature, and muscles and fascia of the back
- May 17, 2005      Lecturer: Research Seminar  
(Lecture offering continuing education units for faculty and clinicians)  
Washington University School of Medicine, Program in Physical Therapy  
Topic: Relationship between soft tissue deformation and applied pressure along the 2nd ray of the plantar neuropathic foot
- April 2005      Lab Assistant: Essential Skills 3  
(Class for entry-level DPT students)  
Washington University School of Medicine, Program in Physical Therapy  
Topics for three labs: Taping, temporary functional orthotics, and neutral casting for the foot and ankle
- Jan. – April 2005      Advisor: Case Integration 3  
(Classes for entry-level DPT students)  
Washington University School of Medicine, Program in Physical

Therapy Advised a 3<sup>rd</sup> year DPT student regarding his written case report and structured literature review (Topic: Physical therapy intervention for patients with patellofemoral pain)

- Sept. – Oct. 2004      Lecturer: Kinesiology 1  
(Class for entry-level DPT students)  
Washington University School of Medicine, Program in Physical Therapy  
Topic for four lectures: Muscle performance (influencing factors, methods of measurement, and exercise regimens for enhancement)
- 1999 – 2000          Clinical Instructor at Jack D. Close & Assoc. in Las Vegas, NV  
Instructed Physical Therapy students from University of Nevada Las Vegas, Idaho State University, & Northwestern University
- 1991 – 1993          Missionary for LDS Church in Santiago, Chile  
Instructed Chilean people in their homes regarding religious principles  
Became fluent in written and spoken Spanish language

### **HONORS & AWARDS:**

Rehabilitation Research Career Development Program K12 Scholar, 2008 – 2011  
Selected as a participant for the Enhancing Rehabilitation Research in the South (ERRIS) Grant Writing Workshop, Charlottesville, VA, Jan 2010  
Chattanooga Research Award, Co-Recipient, APTA 2007  
Promotion of Doctoral Studies Award II (\$15,000 awarded per academic year), Foundation for Physical Therapy, APTA 2005-2006 and 2006-2007  
Promotion of Doctoral Studies Award I (\$7,500 awarded), Foundation for Physical Therapy, APTA 2004-2005  
Peggy Lincoln Memorial Award, Jack D. Close & Assoc. 2001  
Autographed with Excellence Award, Jack D. Close & Assoc. 1999 and 2001  
Certified Strength & Conditioning Specialist (CSCS): Certified in 1998  
Director's Award for Overall Achievement, Program in Physical Therapy, Wash. Univ. 1998  
Robert J. Hickok Merit Scholarship, Program in Physical Therapy, Washington Univ. 1997  
Valedictorian of the College of Physical Education, Brigham Young University 1996  
Magna Cum Laude, Brigham Young University 1996  
Phi Kappa Phi Honor Society: Inducted 1996  
Board of Trustees Scholarship, Brigham Young University 1990-91, 1993-96  
Eagle Scout, Boy Scouts of America, 1990

### **PUBLICATIONS:**

#### **PEER REVIEWED JOURNAL ARTICLES:**

- Buford TW, **Lott DJ**, Marzetti E, Wohlgemuth SE, Vandenborne K, Pahor M, Leeuwenburgh C, Manini TM. Age-related differences in lower extremity tissue compartments and associations with physical function in older adults. *Gerontology*. In Press.
- Akima H, **Lott D**, Senesac C, Deol J, Germain S, Arpan I, Bendixen R, Sweeney HL, Walter G, Vandenborne K. Relationships of thigh muscle contractile and non-contractile tissue with function, strength, and age in boys with Duchenne muscular dystrophy. *Neuromuscular Disorders*. In Press.
- Mathur S, **Lott DJ**, Senesac C, Germain SA, Vohra R, Sweeney L, Walter GA, Vandenborne K. Age related changes in cross-sectional area and torque production in boys with duchenne muscular dystrophy. 2010, *Arch Phys Med & Rehabil*. 91:1051-1058.
- Actis RL, Ventura LB, **Lott DJ**, Smith KE, Commean PK, Hastings MK, Mueller MJ. Multi-plug insole design to reduce peak plantar pressure on the diabetic foot during walking. 2008, *Med Biol Eng Comput*. 46:363-71.

- Lott DJ**, Zou D, Mueller MJ. Pressure gradient and subsurface shear stress in the neuropathic forefoot. 2008, *Clin Biomech.* 23:342-8.
- Zou D, Mueller MJ, **Lott DJ**. Effect of peak pressure and pressure gradient on subsurface shear stresses in the neuropathic foot. 2007, *J. Biomech.* 40: 883-90.
- Lott DJ**, Hastings MK, Commean PK, Smith KE, Mueller MJ. Effect of footwear and orthotic devices on stress reduction and soft tissue strain of the neuropathic foot. 2007, *Clin Biomech.* 22: 352-59.
- Hastings MK, Mueller MJ, Pilgram TK, **Lott DJ**, Commean PK, Johnson JE. Effect of metatarsal pad placement on plantar pressure in people with diabetes and peripheral neuropathy. 2007, *Foot & Ankle Int.* 28: 84-88.
- Actis RL, Ventura LB, Smith KE, Commean PK, **Lott DJ**, Pilgram TK, Mueller MJ. Numerical simulation of the plantar pressure distribution in the diabetic foot during the push-off stance. 2006, *Med Bio Eng Comput.* 44: 653-63.
- Mueller MJ, **Lott DJ**, Hastings MK, Commean PK, Smith KE, Pilgram TK. Efficacy and mechanism of orthotic devices to unload metatarsal heads in people with diabetes and a history of plantar ulcer. 2006, *Phys Ther.* 86: 833-42. (2007 Chattanooga Research Award winning article)
- Mueller MJ, Zou D, **Lott DJ**. "Pressure gradient" as a measure of plantar skin injury. 2005, *Diabetes Care.* 28: 2908-12.
- Lott DJ**, Maluf KS, Sinacore DR, Mueller MJ. Relationship between changes in activity and plantar ulcer recurrence in a patient with diabetes mellitus: a case report. 2005, *Phys Ther.* 85: 579-88.
- Mueller MJ, Sinacore DR, Hastings MK, **Lott DJ**, Strube MJ, Johnson JE. Impact of Achilles tendon lengthening on functional limitations and perceived disability in people with a neuropathic plantar ulcer. 2004, *Diabetes Care.* 27: 1559-64.

#### MANUSCRIPTS IN REVIEW:

- Bishop MD, Horn ME, **Lott DJ**, Arpan I, George SZ. Relationship between muscle damage and pain intensity in exercise induced low back pain. *Spine.* In Review.
- Manini TM, Buford TW, **Lott DJ**, Vandenborne K, Daniels MJ, Knaggs J, Patel H, Pahor M, MG Perri, Anton SD. Effect of weight loss and exercise on regional lower extremity tissue compartments in obese older women. *Obesity.* In Review.

#### MANUSCRIPTS IN PREPARATION:

- Lott DJ**, Forbes SC, Mathur S, Germain SA, Senesac C, Walter GA, Vandenborne K. In-vivo quantification of lower leg muscle metabolites using magnetic resonance imaging and spectroscopy in children with duchenne muscular dystrophy.
- Senesac C, **Lott DJ**, Mathur S, Germain SA, Deol J, Senesac E, Walter GA, Vandenborne K. Longitudinal changes in muscle, function, and strength in duchenne muscular dystrophy- a case series.
- Forbes SC, **Lott DJ**, Senesac C, Finkel RS, Byrne BJ, Sweeney HL, Walter GA, Vandenborne K. MRI/MRS evaluation of a female carrier of Duchenne muscular dystrophy: a case study.
- Deol J, Schmalfuss I, **Lott DJ**, Senesac C, Germain SA, Mathur S, Walter GA, Vandenborne K. Assessment of individual muscle involvement in boys with duchenne muscular dystrophy using MR imaging.
- Arpan I, Forbes SC, **Lott DJ**, Senesac C, Walter GA, Vandenborne K. T<sub>2</sub> mapping of lower leg muscles involvement in children with Duchenne muscular dystrophy.
- Bendixen R, Senesac C, Mathur S, **Lott DJ**, Deol J, Vandenborne K. Participation and quality of life in children with duchenne muscular dystrophy.

PEER REVIEWED ABSTRACTS, ORAL PRESENTATIONS, AND POSTER PRESENTATIONS:

- Lott DJ**, Willcocks R, Tokay Harrington A, Zilke K, Senesac C, Finkel R, Russman B, Sweeney HL, Vandeborne K. Relationship between functional assessments and the six-minute walk test in boys with Duchenne muscular dystrophy. Accepted for the APTA's Combined Sections Meeting, Chicago, IL, Feb 2012.
- Vohra RS, **Lott DJ**, Mathur S, Germain SG, Senesac C, Deol J, Walter GA, Vandeborne K. Quantitative magnetic resonance assessment of lower leg muscles in Duchenne muscular dystrophy. Accepted for the APTA's Combined Sections Meeting, Chicago, IL, Feb 2012.
- Arpan I, Forbes SC, **Lott DJ**, Senesac C, de Vos S, Senesac E, Triplett W, Walter GA, Vandeborne K. Assessment of soleus muscle involvement in children with Duchenne muscular dystrophy using T2 mapping. Accepted for the APTA's Combined Sections Meeting, Chicago, IL, Feb 2012.
- Lott DJ**, Clark R, Forbes SC, Senesac C, Walter GA, Vandeborne K. Longitudinal Assessment of Activity, Muscle Composition, and Functional Ability in Children with Duchenne muscular dystrophy. ACSM's Annual Meeting, Denver, CO, June 2011.
- Lott DJ**, Urcuyo J, Senesac C, Deol J, Vandeborne K. Longitudinal assessment of physical activity in children with Duchenne muscular dystrophy. APTA's Combined Sections Meeting, New Orleans, LA, Feb 2011.
- Crawford R, **Lott DJ**, Senesac C, Forbes SC, Walter GA, Vandeborne K. Non-invasive assessment of muscle and function in patients with Duchenne muscular dystrophy. Public Health & Health Professions Research Day, University of Florida, Gainesville, FL, March 2011.
- Lott DJ**, Senesac C, Urcuyo J, Deol J, Arpan I, Senesac E, Vandeborne K. Daily step count, gait parameters, strength, and function in children with duchenne muscular dystrophy. ACSM's Annual Meeting, Baltimore, MD, June 2010.
- Forbes SC, Germain SA, **Lott DJ**, Vandeborne K, Walter GA. NNLS analyses of T2 in children with duchenne muscular dystrophy. ACSM's Annual Meeting, Baltimore, MD, June 2010.
- Deol J, Schmalfuss I, **Lott DJ**, Mathur S, Senesac C, Germain SA, Walter GA, Vandeborne K. Muscle pathology and functional ability in children with duchenne muscular dystrophy. ACSM's Annual Meeting, Baltimore, MD, June 2010.
- Arpan I, Forbes SC, **Lott DJ**, Senesac C, Germain SA, Sukumar M, Walter GA, Vandeborne K. Distribution of T2 in the soleus muscle of children with duchenne muscular dystrophy. ACSM's Annual Meeting, Baltimore, MD, June 2010.
- Akima H, Deol J, Germain SA, Senesac C, **Lott DJ**, Bendixen R, Walter GA, Vandeborne K. Skeletal muscle contractile and non-contractile components in boys with duchenne muscular dystrophy by MRI. ACSM's Annual Meeting, Baltimore, MD, June 2010.
- Veltri KN, Deol JK, **Lott DJ**, Senesac C, Schmalfuss I, Vandeborne K. Assessment of peroneal muscle size in boys with Duchenne muscular dystrophy. Public Health & Health Professions Research Day, University of Florida, Gainesville, FL, April 2010.
- Urcuyo J, **Lott DJ**, Senesac C, Deol J, Arpan I, Senesac E, Vandeborne K. Muscle composition, strength, and gait comparisons of boys with Duchenne muscular dystrophy. Public Health & Health Professions Research Day, University of Florida, Gainesville, FL, April 2010.
- Lott DJ**, Senesac C, Mathur S, Deol JK, Germain SA, Walter GA, Vandeborne K. Longitudinal examination of non-invasive measures of muscle pathology in children with Duchenne muscular dystrophy. APTA's Combined Sections Meeting, San Diego, CA, Feb 2010.
- Bishop MD, Horn ME, **Lott DJ**. Association among measures of pain experience and muscle damage in acute onset low back pain. APTA's Combined Sections Meeting, San Diego, CA, Feb 2010.
- Deol JK, Schmalfuss I, **Lott DJ**, Mathur S, Senesac C, Germain SA, Walter GA, Vandeborne, K. Magnetic resonance imaging as a qualitative assessment tool of muscle pathology in children with duchenne muscular dystrophy. APTA's Combined Sections Meeting, San Diego, CA, Feb 2010.
- Lott DJ**, Bendixen R, Mathur S, Senesac C, Kinsey A, Vandeborne K. Correlations between physical activity, function, and self-assessment of participation in children with duchenne muscular dystrophy. ACSM's Annual Meeting, Seattle, WA, May 2009.
- Bendixen R, Senesac C, Mathur S, **Lott DJ**, Deol J, & Vandeborne K. Impact of Muscle

- Dysfunction on Participation and Quality of Life in Boys with Duchenne Muscular Dystrophy. Society for Research in Child Development Biennial Meeting, Denver, CO, April 2-5, 2009.
- Kinsey A, **Lott DJ**, Mathur S, Senesac C, Germain SA, Vohra R, Walter GA, Vandenberg K. Gait and strength in boys with Duchenne muscular dystrophy. Public Health & Health Professions Research Day, University of Florida, Gainesville, FL, April 2009.
- Lott DJ**, Mathur S, Senesac C, Germain S, Kinsey A, Walter G, Vandenberg K. Gait function is related to muscle fat infiltration quantified via magnetic resonance spectroscopy in children with Duchenne muscular dystrophy. APTA's Combined Sections, Meeting, Las Vegas, NV, February, 2009.
- Mathur S, **Lott DJ**, Germain SA, Vohra RS, Senesac C, Vandenberg K, Walter GA. Magnetic resonance imaging and spectroscopy to monitor disease progression in boys with Duchenne muscular dystrophy. APTA's Combined Sections, Meeting, Las Vegas, NV, February, 2009.
- Bendixen R, Senesac C, Mathur S, **Lott DJ**, Vandenberg K. Interrelations between function, participation and quality of life in boys with Duchenne muscular dystrophy. APTA's Combined Sections, Meeting, Las Vegas, NV, February, 2009.
- Arpan I, **Lott DJ**, Mathur S, Germain SA, Senesac C, Walter GA, Vandenberg K. Muscle fat infiltration is a predictor of reduced functional ability in boys with Duchenne muscular dystrophy. Annual Neuromuscular Plasticity Symposium, University of Florida, Gainesville, FL, Jan 2009.
- Deol J, Mathur S, **Lott DJ**, Senesac C, Germain SA, Kinsey A, Vohra R, Walter GA, Vandenberg K. Comparison of gait parameters in children with Duchenne muscular dystrophy and healthy controls. Annual Neuromuscular Plasticity Symposium, University of Florida, Gainesville, FL, Jan 2009.
- Mathur S, **Lott DJ**, Senesac C, Germain SA, Vandenberg K, Walter GA. Quantification of longitudinal changes in muscle pathology in boys with Duchenne muscular dystrophy using magnetic resonance imaging and spectroscopy. American Congress of Rehabilitation Medicine, Toronto ON, Oct 2008.
- Mathur S, Senesac C, **Lott DJ**, Vandenberg K, Walter GA. Muscle strength and functional status in boys with Duchenne muscular dystrophy. ACSM's Annual Meeting, May 2008, Indianapolis, IN. Med Sci Sports Exerc May 2008 Suppl.
- Lott DJ**, Mathur S, Germain SA, Senesac C, Walter GA, Vandenberg K. In-vivo quantification of soleus muscle changes from fat infiltration using magnetic resonance imaging and spectroscopy in children with Duchenne muscular dystrophy. Annual Neuromuscular Plasticity Symposium, University of Florida, Gainesville, FL, January, 2008.
- Mathur S, **Lott DJ**, Germain SA, Senesac C, Walter GA, Vandenberg K. Skeletal muscle damage assessed using magnetic resonance imaging and spectroscopy in children with Duchenne muscular dystrophy. Poster Presentation, 3<sup>rd</sup> Annual Neuromuscular Plasticity Symposium, University of Florida, Gainesville, FL, January, 2008.
- Lott DJ**, Sinacore DR, Mueller MJ. Skin temperature response to stress and activity on the foot. Platform Presentation at the Gossman Seminar, APTA's Combined Sections Meeting, Boston, MA, February, 2007.
- Lott DJ**, Mueller MJ, Hastings MK, Commean PK, Smith KE. Effect of footwear and orthotic devices on soft tissue thickness and pressure variables of the neuropathic foot. Platform Presentation, Orthopaedic Section, APTA's Combined Sections Meeting, San Diego, CA February, 2006
- Lott DJ**, Commean PK, Smith KE, Mueller MJ. Relationship between soft tissue deformation and applied pressure along the second ray of the neuropathic foot. Poster Presentation at the 20th International Society of Biomechanics congress, Cleveland, Ohio, August, 2005.
- Zou D, Mueller MJ, **Lott DJ**. "Pressure gradient" as a potential indicator of plantar skin injury on the neuropathic foot. Poster Presentation at the 20th International Society of Biomechanics congress, Cleveland, Ohio, August, 2005.
- Actis RL, Ventura LB, Szabo BA, Commean PK, Smith KE, **Lott DJ**, Mueller MJ. Plantar pressure distribution in the diabetic foot during push-off: numerical simulation using the p-version of the



finite element method. Platform Presentation at the 20th International Society of Biomechanics congress, Cleveland, Ohio, August, 2005.

**Lott DJ**, Mueller MJ, Hastings MK, Commean PK, Smith KE. Effect of footwear on pressure reduction and soft tissue deformation of the plantar neuropathic foot. Platform Presentation at the Gossman Seminar, APTA's Combined Sections Meeting, New Orleans, LA, February, 2005.

**Lott DJ**, Bohnert KL, Klaesner JW, Maluf KS, Mueller MJ, Sinacore DR. Amount and intensity of activity during off-loading treatment and the healing of neuropathic plantar ulcers. Poster Presentation at the National Center for Medical Rehabilitation Research Training Workshop, Dec. 2003; Poster Presentation at APTA's Combined Sections Meeting, Nashville, TN, February, 2004. JOSPT. 2004, 34 (1): A24.

**Lott DJ**, Sinacore DR, Strube MJ, Mueller MJ. Achilles tendon lengthening with total contact casting treatment and the functional abilities of patients with neuropathic plantar ulcers. Platform Presentation at the Gossman Seminar, APTA's Combined Sections Meeting, Nashville, TN, February, 2004.

### **GRANTS & FUNDING:**

#### **CURRENT:**

Title: MR Monitoring of PTC 124 Treatment in DMD (RC1 AR058189)

Principal Investigator: Krista Vandenborne

Amount Awarded: \$839,690 (2009-2011)

Role: Co-Investigator

Title: Magnetic Resonance Imaging and Biomarkers in Muscular Dystrophy (R01 AR056973)

Principal Investigator: Krista Vandenborne

Role: Co-Investigator

Amount awarded: \$7,345,781 (2010-2015)

Title: Failed Regeneration in the Muscular Dystrophies: Inflammation, Fibrosis, and Fat

Principal Investigator: Glenn Walter

Role: Co-Investigator

Amount awarded: \$142,613.88 (2010-2015)

#### **PENDING:**

Title: Muscle Injury prevention and Rehabilitation in Military Personnel

Principal Investigator: Donovan Lott

Submitted to the Department of Defense

Role: PI

#### **PREVIOUS:**

Title: Rehabilitation Research Career Development Program (K12-HD055929)

Principal Investigator: Kenneth Ottenbacher (University of Texas Medical Branch)

Amount awarded: \$4,975,148 (2007-2012)

Role: K12 Scholar from 2008-2011

Title: Musculoskeletal Pain and Muscle Dysfunction in Soldiers with Traumatic Injuries (VA248P0199)

Principal Investigator: Krista Vandenborne (University of Florida), Paul Hoffmann (VA)

Amount awarded: \$50,000 (2007-2008)

Role: Post-doctoral Fellow

SUBMITTED BUT NOT FUNDED:

Title: Muscle Pathology and Gait in Children with Duchenne muscular dystrophy

Principal Investigator: Donovan Lott

Submitted to the Muscular Dystrophy Association (July 2009)

Role: PI

Title: Lower limb muscle function as a predictor of disability in boys with Duchenne muscular dystrophy

Principal Investigator: Claudia Senesac

Submitted to the Pediatric Section of the APTA (Sept 2007)

Role: Co-PI