UNIVERSITY OF FLORIDA

Department of Physical Therapy

COLLEGE OF PUBLIC HEALH AND HEALTH PROFESSIONS

<u>Curriculum Vitae</u>

July 2023

Krista Vandenborne, PT, PhD

Office Address: Department of Physical Therapy

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Gainesville, FL 32610-0154

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Education:

1988-1993 Ph.D Physical Therapy

Free University of Brussels, Brussels, Belgium

1984-1988 Licentiate Physical Therapy and Motoric Revalidation

Free University of Brussels, Brussels, Belgium

Postgraduate Training and Fellowship Appointments:

1993-1994 NIH-T32 Post-Doctoral Fellow, Neurorehabilitation

Department of Rehabilitation Medicine University of Pennsylvania, Philadelphia

1992-1993 Research Fellow, Belgian National Funds for Scientific Research

Department of Human Physiology

Free University of Brussels, Brussels, Belgium

Department of Radiology

University of Pennsylvania, Pennsylvania

1990-1992 Research Fellow, Belgian National Funds for Scientific Research

Department of Human Physiology

Free University of Brussels, Brussels, Belgium Department of Biochemistry and Biophysics University of Pennsylvania, Philadelphia 1989-1990 Fulbright Scholar, Belgian American Educational Foundation

Department of Biochemistry and Biophysics University of Pennsylvania, Philadelphia

1988-1989 Research Fellow, Sports Medicine

Department of Human Physiology

Free University of Brussels, Brussels, Belgium

Faculty Appointments:

2018 - Chair & Distinguished Professor

Department of Physical Therapy University of Florida, Gainesville

2015 – Director, Imaging DMD, UF

Clinical Trials in Muscular Dystrophies University of Florida, Gainesville

2012- Director, Neuromuscular Research and Programs

College of Public Health and Health Professions

University of Florida, Gainesville

2009-2012 Associate Dean for Research and Planning

College of Public Health and Health Professions

University of Florida, Gainesville

2007-2018 Chair & Professor

Department of Physical Therapy University of Florida, Gainesville

2007-2010 Research Foundation Professor

University of Florida, Gainesville

2003-2005 Associate Director for Human Imaging

Advanced Magnetic Resonance Imaging and Spectroscopy Center

University of Florida, Gainesville

2002-2007 Chair & Associate Professor

Department of Physical Therapy University of Florida, Gainesville

2001-2002 Associate Professor (Tenured)

Department of Physical Therapy University of Florida, Gainesville

1999-2001 Research Assistant Professor

Department of Physiology (Primary appointment)

University of Pennsylvania, Philadelphia

1998-2001 Research Assistant Professor

Department of Radiology (Secondary appointment)

University of Pennsylvania, Philadelphia

1998-1999 Chair of Research

Department of Rehabilitation Medicine University of Pennsylvania, Philadelphia

1997-1999 Visiting Professor

Department of Sports Medicine Free University Brussels, Belgium

1994-1999 Research Assistant Professor

Department of Rehabilitation Medicine University of Pennsylvania, Philadelphia

Specialty Certification:

1988 Licentiate in Physical Therapy and Motoric Revalidation

<u>Licensure:</u> Belgium

Awards, Honors, and Membership in Honorary Societies:

2019-2022 Term Professor, College of Public Health and Health Professions

2018 Distinguished Professor of Physical Therapy

2011	Member, NINDS Neuromuscular Diseases (NMD) Pediatric CDE
	Working Group, National Institutes of Health
2007-2010	Research Foundation Professor
2003-	Member, National High Magnetic Field Laboratory
1999	Associate Member, Institute for Human Gene Therapy, University
	of Pennsylvania
1998	Member of the Pennsylvania Muscle Institute
1996	APTA: Eugene Michels Researcher's Forum speaker
1995	NIH FIRST Award (R29-HD33738)
1994	McCabe Fund Pilot Project Award
1994	Scientific Astra-Prize from the Belgian Association of Sports
	Medicine and Sports
	Science
1993	Summa Cum Laude, Ph.D. in Physical Therapy and Motoric
	Revalidation
1992-1994	Fellowship of the Belgian National Funds for Scientific Research
1992	Fellowship for long study periods in a foreign country (NFWO)
1990-1992	Fellowship of the Belgian National Funds for Scientific Research
1989	Fulbright Award, Belgian American Educational Foundation
	Fellow
1988	Summa Cum Laude, Licentiate in Physical Therapy and Motoric
	Revalidation

Memberships in Professional and Scientific Societies:

International Societies:

International Society for Educators in Physiotherapy

National Federation for Doctors and Licentiates in Physical Therapy (Belgium Association)

Belgian American Education Foundation (BAEF)

International Society for Magnetic Resonance in Medicine (ISMRM)

National Societies:

American Society of Sports Medicine

American Physiological Society

Local Societies:

Fellow, Institute of Aging, University of Pennsylvania

Member, Pennsylvania Muscle Institute

Associate Member, Institute for Human Gene Therapy, University of

Pennsylvania

Member, McKnight Brain Institute, University of Florida

Member, Advanced Magnetic Resonance Imaging and Spectroscopy Center

Member, Brooks Rehabilitation Center, University of Florida

Member, Institute of Aging, University of Florida

Editorial Positions:

2008-	Ad hoc Reviewer for Applied Physiology
2002-	Ad hoc Reviewer for Physical Therapy
2000-	Ad hoc Reviewer for Acta Physiologica Scandinavia
2000-	Ad hoc Reviewer for NMR in Biomedicine
1999-	Ad hoc Reviewer for Exercise & Sports Science Reviews
1999-	Reviewer for Magnetic Resonance in Medicine
1996-	Ad hoc Reviewer for Journal of Gerontology: Biological Sciences
1996-	Ad hoc Reviewer for American Journal of Applied Physiology

Reviewer in scientific committees and member of scientific advisory boards:

2016	University of Alabama – Center for Exercise Medicine - External
	Advisory Panel
2013	Grant Reviewer, NIH/NIAMS Musculoskeletal Biology P30 Grants
2012	Ad hoc Grant Reviewer for Prinses Beatrix Fonds
2011-2015	Ad hoc Reviewer, Skeletal Muscle Biology and Exercise Physiology
	study section (SMEP)
2011	External Reviewer, University of Iowa- Department of Physical
	Therapy and Rehabilitation Science

2011	Member, NINDS Neuromuscular Diseases (NMD) Pediatric CDE
	Working Group, National Institutes of Health
2011	Ad hoc Reviewer, Ancillary Studies to Large Ongoing Clinical
	Projects2011/08 Council ZAR1 CHW M1 1, National Institutes of
	Health
2009-2010	Scientific Reviewer, Duchenne Parent Project, The Netherlands
2008-2014	Scientific Advisory Board Member: National Center for Medical
	Rehabilitation Research, Integrated Molecular Core for
	Rehabilitation Medicine, Children's National Medical
	Center, Washington DC
2007	External Reviewer, University of Maryland- School of Medicine –
	Department of Physical Therapy and Rehabilitation Science
2006	Chair Special Emphasis panel Session (August 2006): ZHD1 DSR-T
	BMS
2005-2009	Permanent Reviewer: "Function, Integration and Rehabilitation
	Sciences Subcommittee" NIH study section
2004-2008	Ad hoc Reviewer: Special Emphasis Panel-ZHD1 DSR-T BMS
2004-2006	NIH: Ad hoc reviewer: Skeletal Muscle and Exercise Physiology
	study section
2003	Reviewer Special Emphasis Panel: Molecular and Cellular Basis of
	Contractures of the Design of Therapeutic Interventions
2000	Ad hoc reviewer Moss Rehabilitation Research Institute
2000-2002	NIH: Ad hoc reviewer Geriatrics and Rehabilitation Medicine study section
2000	NASA: Reviewer Nutrition, Physical Fitness Rehabilitation study
2000	section
1999	NIH: Ad hoc Reviewer Chronic Fatigue Syndrome study section

Principal Investigator of Grants (Direct Cost):

A Phase 2 Randomized, Double-blind, Placebo-controlled Study to Evaluate the Effect of EDG-5506 on Safety, Biomarkers, Pharmacokinetics, and Functional Measures in Adults and Adolescents with Becker Muscular Dystrophy (EDG-5506-201). \$1,653,819. Edgewise Therapeutics, Inc. 6/14/22 – completion. (Principal Investigator).

Microdystrophin Gene Transfer Study in Adolescents and Children with DMD (IGNITE DMD). \$37,850. Solid Biosciences Inc. 11/29/21 - completion. (Principal Investigator).

A Phase 3, Multinational, Randomized, Double- Blind, Placebo-Controlled Systemic Gene Transfer Therapy Study to Evaluate the Safety and Efficacy of SRP-9001 in Non-Ambulatory and Ambulatory Subjects with Duchenne Muscular Dystrophy (ENVISION- SRP-9001-303). \$1,411,451. Sarepta Therapeutics, Inc. 11/2/21 - completion. (Principal Investigator).

Defining Endpoints in Becker Muscular Dystrophy - GRASP" under protocol number GRASP-01-002 ("GRASP"). \$1,639,223. Edgewise Therapeutics, Inc. 10/20/21 – completion. (Principal Investigator).

An Open-Label, Systemic Gene Delivery Study Using Commercial Process Material to Evaluate the Safety of and Expression from SRP-9001 in Subjects with Duchenne Muscular Dystrophy (EMBARK)" (SRP-9001-301). \$1,332,762. Sarepta Therapeutics, Inc. 7/23/21 - completion. (Principal Investigator).

An Open-Label, Systemic Gene Delivery Study Using Commercial Process Material to Evaluate the Safety of and Expression from SRP-9001 in Subjects with Duchenne Muscular Dystrophy (ENDEAVOR)" (SRP-9001-103). \$503,992. Sarepta Therapeutics, Inc. 5/18/21 - completion. (Principal Investigator).

A randomized, double-blind, placebo-controlled study of SRP-9001 for Duchenne Muscular Dystrophy (SRP-9001-102). \$508,783. Sarepta Therapeutics, Inc. 9/8/20 – completion. (Principal Investigator).

R01AR056973: Magnetic Resonance Imaging and Biomarkers for Muscular Dystrophy. \$6,398,104. NIH – NIAMS. 9/10/20 – 8/31/25. (Principal Investigator).

A Phase 1/2 Open-label, Dose Escalation and Dose Expansion Study to Evaluate the Safety, Tolerability, Pharmacodynamics, and Pharmacokinetics of Intravenous RGX-202 Gene Therapy in Males with Duchenne Muscular Dystrophy (DMD) (RGX-202-1101). \$ 1,802,454.75. REGENXBIO Inc. 3/4/22 – 12/30/24. (Principal Investigator).

5K12HD055929-15: Rehabilitation Research Career Development Program. \$297,061. University of Texas Medical Branch/NIH – NICHD. 9/1/21 – 8/31/23. (Site Principal Investigator).

A Randomized, Double-Blind, Placebo-Controlled Phase 1b Study with Open-Label Extension to Assess the Safety, Tolerability and Preliminary Efficacy of ASP0367 (MA-0211) in Pediatric Male Patients with Duchenne Muscular Dystrophy. \$246,527Astellas Pharma Inc. 9/19/21 – 9/30/23 (Principal Investigator).

A Phase 1/2 Dose-escalation Study to Evaluate the Safety of LION-101 in Adult Subjects With Genetic Confirmation of LGMD2I/R9 (Part1) (LION-CS101). \$314,150. Asklepios BioPharmaceutical, Inc. 3/23/22 – 3/22/24. (Principal Investigator).

A natural history and biomarker development study in subjects with limb-girdle muscular dystrophy 2i (LGMD 2i MRI Subproject). \$527,177. Virginia Commonwealth University/ ML Bio Solutions, Inc. 2/15/20 – 2/18/23 (Principal Investigator).

A randomised, double blind, placebo controlled, multicentre study to evaluate the efficacy and safety if givinostat in ambulant patients with Duchenne Muscular Dystrophy (Placebo-arm supplement). \$66,588. Italfarmaco S.p.A., 2/2/22 – 6/30/22. (Principal Investigator).

A natural history and biomarker development study in subjects with limb-girdle muscular dystrophy 2i (LGMD 2i), 2020–2022, \$527,177.00 USD (Director and Principal Investigator)

Rehabilitation Research Career Development Program, K12 HD055929-08, 2007-2022, \$2,350,651 (Deputy Director and PI on subcontract)

A Randomized, Double-Blind, Placebo-Controlled Study to Evaluate the Macroscopic Effects on Muscles, The Safety and Tolerability, and the Efficacy of Givinostat in Patients with Becker Muscular Dystrophy, \$334,180 USD, 2017-2021, (Principal Investigator)

ImagingDMD for Givinostat Phase 3 Clinical Trial. Italfarmaco S.p.A. DSC/14/235/48, 2016-2020 \$3,196,520 (Principal Investigator)

A Randomised, double blind, placebo controlled study to evaluate the micromacroscopic effects on muscles, the safety and tolerability, and the efficacy of givinostat in patients with Becker Muscular Dystrophy, Italfarmaco SpA, DSC/14/235/53, 2017-2019, \$142,142 (Principal Investigator)

Interdisciplinary pre-doctoral training in neuromuscular plasticity and rehabilitation. NIH-T32, 2008-2019 \$1,645,223 (Principal Investigator)

A Phase 2 clinical Study to Assess Activity and Safety of SMT C1100 in Boys with DMD, Summit (Oxford) Therapeutics, Inc. SMT C11005, 2015-2018 \$1,478,637 (Principal Investigator)

MR Imaging and Spectroscopy in DMD patients enrolled in CAT-1004., Catabasis Pharmaceuticals Inc., 2016-2018, 2,164,601 (Principal Investigator)

MR Imaging in Eteplirsen study 4658-203, Sarepta Therapeutics, Inc. 4658-203, 2015-2018, \$1,082,995 (Principal Investigator)

A Phase ½ Study of CAT-1004 in pediatric patients with Duchenne muscular dystrophy, Catabasis Pharmaceuticals Inc., CAT-1004-201, 2015-2019, \$1,620,944 (Principal Investigator)

Magnetic Resonance Imaging and Biomarkers for Muscular Dystrophy, Eli Lilly & Co., 2013-2015, \$233,742 (Principal Investigator)

LLV5: MRI/MRS of Skeletal Muscle in Boys with Duchenne Muscular Dystrophy, NIH H6D-MC-LVJJ, 2013-2016 \$233,742 (Principal Investigator)

Magnetic Resonance Imaging and Biomarkers for Muscular Dystrophy - Administrative Supplement for Collaborative Activities to Promote Metabolomics Research, NIH, R01 AR056973, 2012-2013, \$100,000 (Principal Investigator)

Magnetic Resonance Imaging and Biomarkers for Muscular Dystrophy-Supplement, PPMD, 00650, 2012-2013, \$59,598.00 (Principal Investigator)

Therapeutic Strategies to Augment Muscle Rehabilitation, NIH/NICHD P01 HD059751, ARRA Supplemental Grant, 2009-2012, \$1,567,539 (Principal Investigator)

MR Monitoring of PTC124 Treatment in DMD, NIH/NIAMS RC1 AR058189, Challenge Grant, 2009-2012, \$735,407 (Principal Investigator)

MR Monitoring of PTC124 Treatment in DMD, MDA, 2009-2010, \$126,295 (Principal Investigator)

MRI Imaging and Biomarkers for Muscular Dystrophy, PPMD 8509, 2009-2010, \$200,000 (Principal Investigator)

Molecular Signatures of Muscle Rehabilitation after Limb Disuse, NIH/NICHD ARRA Administrative Supplement, 2009-2011, \$134,907 (Principal Investigator)

Viral Mediated IGF-I Gene Therapy, The Craig H. Neilsen Foundation, 2008-2010, \$119,962 (Principal Investigator)

Validation of MRI for Clinical Trials in Muscular Dystrophy, Muscular Dystrophy Association, 2006-2009, \$391,876 (Principal Investigator)

Modulation of Muscle Growth for Muscle Dystrophies, Subcontract to the University of Pennsylvania NIH-U54AR052646, 2006-2011, \$5,000,000, (PI: Lee Sweeney, Role: PI on subcontract)

IGF-1 Gene Transfer and Locomotor Training After SCI, Paralyzed Veterans of America Spinal Cord Foundation, 2005-2006, \$148,549 (Principal Investigator)

Molecular Signatures of Muscle Rehabilitation After Limb Disuse, NIH-R01HD048051, 2004-2010 \$1,250,000, (Principal Investigator)

Interdisciplinary Training in Rehabilitation and Neuromuscular Plasticity, NIH T32HD043730A, 2003-2009, \$797,980 (Principal Investigator)

IGF-I Gene Transfer to Accelerate Recovery Following Disuse, NIH RO1HD042955, 2002-2006, \$550,571 (Principal Investigator)

Mechanisms of Muscle Dysfunction and Recovery after Limb Disuse, NIH-R01 HD37645-01, 1999-2004, \$800,769, (Principal Investigator)

Gene Therapy for Neuromuscular Disorders, Muscular Dystrophy Association, 1998-1999, \$25,000, (Principal Investigator)

Restoration of Muscle Function during Rehabilitation, NIH-First Award, 1-R29-HD33738-01, 1995-2000, \$349,896, (Principal Investigator)

Muscular Atrophy - Noninvasive Quantitative Assessment Using NMR, McCabe Fund Pilot Project Award, 1994, \$20,000, (Principal Investigator)

Co-PI on Grants (Direct Cost):

W81XWH-21-1-0566: MR Biomarkers of Bone Quality in DMD. (Rebecca Willcocks, PI). \$36,765. US Army Medical Research Acquisition. 9/30/21 – 9/29/24. (Co-Investigator).

R21TR004006: Optimizing Muscular Dystrophy Clinical Trial Designs using Modeling and Simulation (Sarah Kim, PI). \$39,024. NIH – NCATS. 9/1/21 – 7/31/23. (Co-Investigator).

P50AR052646: Understanding and Improving Therapies for the Muscular Dystrophies. (H. Lee Sweeney, PI). \$104,429. NIH – NIAMS. 5/3/22 – 7/31/23. (Co-Investigator).

R01AR076060: Development of MRI, Alternative Splicing, and Functional Abilities as Biomarkers in Myotonic Dystrophy Type 1. \$36,915. (Donovan Lott, PI). NIH – NIAMS. 8/17/20 – 6/30/23. (Co-Investigator).

T32HD043730: Interdisciplinary Training in Neuromuscular Plasticity and Rehabilitation. (David Fuller, PI). \$0 NIH – NIHCD. 5/1/22 – 4/30/23. (Co-Investigator).

MR Assessment of Bioenergetics and Microvascular Function in Dystrophic Muscle, NIH/NIAMS R01 R01AR070101, 2016-2021, \$1,721,785 (PI: Sean Forbes, Role: Co-PI)

Failed Regeneration in the Muscular Dystrophies: Inflammation, Fibrosis and Fat, Senator Paul D Wellstone Muscular Dystrophy Center Grant NIH-U54AR052646, 2005-2020, \$7,612,680(PI: Lee Sweeney; Role: Co-PI)

OneFlorida Clinical Research Consortium Phase II, PCORI CDRN-1501-26692, 2015-2018, \$7,618,009 (PI: Elizabeth Shenkman, Co-Investigator)

The Relationship Between Genomic Variants and MRI/MRS Markers in DMD, NIH/NIAMS R01 AR065943, 2013-2017, \$978,228 (PI: Glenn Walter, Role: Co-PI)

Failed Regeneration in the Muscular Dystrophies: Inflammation, Fibrosis and Fat, Senator Paul D Wellstone Muscular Dystrophy Center Grant NIH-U54AR052646, 2005-2020, \$7,612,680 (PI: Lee Sweeney; Role: Co-PI)

Optical Imaging of Dystrophic and Damaged Muscle, Department of Defense, Office of the Congressionally Directed Medical Research Programs, MD 1100050, 2015-2016, \$978,228 (PI: Glenn Walter, Role: Co-PI)

Development of a Strength Training Protocol in Duchenne Muscular Dystrophy. NIH/NIAMS (R21 AR064949). 2014- 2017, \$275,000 (PI: D. Lott, Role: Co-PI)

Planning a Multi-Center clinical trial of PDE5A inhibition for DMD, National Institutes of Health, NIAMS U34 AR062893, Clinical Trial Planning grant, 2012-2013, \$200,000 (PI: Ronal Victor, Role: Co-PI)

Muscle Injury Prevention and Rehabilitation in Military Personnel. Florida Institute on Disability and Rehabilitation, Department of Defense, Project 6 on MRMC 10218007 USA, 2011-2013, \$182,595, (PI: Donovan Lott; Role Co-PI)

Florida Trauma Rehabilitation Center for Returning Military Personnel, Department of Defense, USA MRMC 10218007, 2011-2014, \$2,096,000, (PI: William Mann; Role: Co-PI)

Comparative Resistance Exercise Effects on Knee Osteoarthritis Pain, Functional Impairment and Cartilage Turnover, NIH, R03, AR059786, 2010-2013 \$140,640 (PI: Kevin Vincent; Role: Co-PI)

Claude D. Pepper Older Americans Independence Center, NIH, 2006-2011, \$6,121,206 (PI: Marco Pahor; Role: Co-PI 2006-2008)

Weight loss in older obese African American Women, University of Florida Funding Opportunity, 2006-2007, \$81,876 (PI: Michael Perri; Role: Co-PI)

Noninvasive Monitoring and Tracking of Muscle Stem Cells, NIH-R01HL078670, 2004-2008, \$1,108,000, (PI: Glenn Walter; Role: Co-PI)

NMES after total knee arthroplasty, NIH-RO1 subcontract to University of Delaware, 2001-2006, \$1,125,000 (PI: Lynn Snyder-Mackler; Role PI on subcontract to University of Delaware in 2001-2002)

Gradient Upgrade on 2T Human MRI/MRS system, 1S10RR015709-01, 2001, \$326,750, (PI: John S. Leigh, Role: Co-PI)

Physiological Basis of Muscle Functional MRI, NIH-RO1AR043903, 2001-2006, \$900,000, (PI: Ronald Meyer; Role: PI on subcontract to Michigan State University in 2001 until transfer to UF)

Metabolic and Transport Pathways in Skeletal Muscle, NIH-R01AR045394, 2001-2006, \$980,346 (PI: Robert Forster; Role: PI on subcontract to University of Pennsylvania)

Energy Homeostasis in Human Obesity, NIH RO1-DK30583, 1996-2001, \$1,324,500, (PI: Rudolph Leibel; Role: PI on subcontract to Columbia University)

The effect of Estrogen and DHEA supplementation on serum Lipids, Muscle Mass, Muscle and Endurance: A Pilot RCT, Berlex Foundation, 1999-2000, \$50,000, (PI: Kurt Barnhart; Role: Co-PI)

Testosterone and Reconditioning in Elderly Man, ALZA, 1999-2000, \$80,906, (PI: Peter Snyder; Role: Co-PI)

A Resource for Magnetic Resonance and Optical, NIH-2P41-RR02305-12, 1994-1999, \$3,222,291 (PI: John S. Leigh, Role Co-PI)

Mentor/Sponsor on Grants (Direct Cost):

MRI, MRS, and functional characterization of the arm in DMD. Muscular Dystrophy Association (AGR DTD 07-17-2015) 2015-2018, \$171,411 (PI: Rebecca Willcocks)

MRI/MRS assessment of perfusion and metabolism in dystrophic muscle. Muscular Dystrophy Association Development Grant, 2010-2013, \$179,327 (PI: Sean Forbes)

Comprehensive Assessment of the Impact of Illness and Disability in Children, National Institute for Child Health & Human Development/National Institutes of Health (K01 HD064778), 2010-2015, \$524,710 (PI: Roxanne Bendixen)

UF Clinical and Translational Science Award, NIH-5KL2RR029888, 2009-2014, \$3,019,440 (PI: David Nelson; Role: Mentor, member of the CTSI's Translational Science Adv. Committee, member KL2 Multidisciplinary Advisory Committee.

Peripheral muscle properties and the energetic cost of walking post-stroke. Department of Veterans Affairs Career Development Award-2, 2008-2013, \$352,068 (PI: Chris Gregory)

Muscle Weakness and Post-Traumatic Knee OA, NIH-K01 career award, 2007-2012, \$487,907 (PI: Terese Chmielewski)

Development of a Lyapunov-based control framework for NMES applications", NSF Career award, 2006-2009, \$350,000 (PI: Warren Dixon)

Perineural Anesthetic Infusion after Joint Replacement, NIH-K23GM077026, 2005-2010, \$571,250, (PI: Brian Ilfeld)

Muscle Function and Locomotor Recovery after CNS injury, VA postdoctoral fellowship, 2005-2007, \$108,000 (PI: Chris Gregory)

Perineural Local Anesthetic Infusion Following Total Knee and Hip Replacement, Foundation For Anesthesia Education Research (FAER), 2005-2007, \$255,000, (PI: Brian Ilfeld)

Muscle Plasticity in Spinal Cord Injury, VA postdoctoral fellowship, 2003-2005, \$102,000, (PI: Jennifer Stevens)

Anti-oxidants to promote muscle recovery following limb disuse, predoctoral fellowship, Department of Veterans Affairs, \$20,000, 2003-2004, (PI: Tiffany Frimel)

Muscle Damage during Reloading, PODS Level II Scholarship, Foundation for Physical Therapy, American Physical Therapy Association, 2003-2004, (PI: Tiffany Frimel)

PODS Level I Scholarship, Foundation for Physical Therapy, American Physical Therapy Association, 2002-2003 (PI: Tiffany Frimel).

Restoration of Muscle Function During Rehabilitation, NIH Research Supplement for Under-represented Minorities, 3-R29-HD-337838-01-S1, 1996-1997, \$33,527, (PI: Richard Williams)

Consultant on Grants (Direct cost):

NCMRR Integrated Molecular Core for Rehabilitation Medicine Infrastructure grant, R24HD050846, 2005- 2011, \$5,340,450, (PI: Eric Hoffman)

Strength Training using NMES in Children with CP, NIH-R01HD043859, 2004-2009, \$750,000, (PI: Samuel Lee)

Academic Committees:

2002-	Member College of Public Health and Health Professions Executive
	Committee
2009-2017	Member, UF-CTSI, KL2 Multidisciplinary Advisory Committee.
2015-2016	Chair, Occupational Therapy Department Chair Search Committee
2014-2015	Member, Neuroscience and Brain Preeminent Recruitment Committee
2015	Member, Director of Bachelor of Public Health Search Committee
2014	Member, Metabolomics Preeminent Recruitment Committee
2011-2013	Member, UF CTSI Executive Operations Committee
2011	Member, College of Public Health and Health Professions, PhD Review
	Committee, University of Florida
2010-2011	Member, College of Public Health and Health Professions, Chair of
	Clinical and Health Psychology Search Committee, University of Florida
2010-2011	Member, College of Engineering, Chair of Biomedical Engineering Search
	Committee, University of Florida
2010	Member, VA BRRC Director Search Committee, VA Medical
	Center/University of Florida
2009	Member, College of Medicine Dean Search Committee, University of
	Florida
2009	Member, PHHP Dean Search Committee, University of Florida
2008	Grant Reviewer, Washington University Grant Review
2008	External Reviewer, University of Delaware

2007-2008 Chair, Biomedical Research Program, University of Florida Opportunity

Fund 2007 External Reviewer, Department of Physical Therapy,

University of Maryland

2002 Member, Leadership Committee, College of Public Health and Health

Professions

1999 Member, Faculty- 2000, Special Opportunities Working group

1998-1999 Chair, Research Committee, Department of Rehabilitation Medicine

1997 Member, Review Committee, Pennsylvania Muscle Institute

Major Teaching and Research Training Activities:

Supervision of students and research fellows:

Mario Beltran, Undergraduate Student, College of HHP, Applied Physiology and Kinesiology, 2012

Emelie Grady, Undergraduate Student, College of HHP, Applied Physiology and Kinesiology, 2012

Steven Svoboda, High School Student, UF-Student Science Training Program, Florida Alliance Scholar, 2010-2011

Nicholas Israel-Stahre, Undergraduate Student, College of HHP, Applied Physiology and Kinesiology, 2010-2011

Stephanie Wickham, Undergraduate Student, College of PHHP Honors Program, 2009-2010

Jacqueline Urcuyo, Undergraduate Student, College of PHHP Honors Program, 2009-2010

Alicia Kinsey, Undergraduate Student, College of PHHP Honors Program, 2008-2009 Robyn Hinds, Undergraduate Student, College of PHHP Honors Program, 2008-2009 Patty Hovis, Graduate Student, Physical Therapy, 2008 Kayla Vallerand, Undergraduate Student 2004-2005

Fatema Kapadia, Masters Student, Physical Therapy, 2002-2004

Peter Yeh, Undergraduate, Electrical Engineering, 1999

Mark Kurish, Undergraduate, Biology, 1998-1999

Chris Gregory, Graduate Student, 1996-1999

David Russ, Graduate Student, Biomechanics and Movement Science, 1998

Matthew Muskett, Undergraduate, Biology, 1998-1999

Richard Williams, Graduate Student, 1997-1998

Emad Al-Farre, Masters Student, Oral Biology, 1997-1998

William Shull, research fellow, Rehabilitation Medicine, 1995

Naveen Ramineni, Medical student, 1998

William Luchetti, resident, Orthopedic Surgery, 1996-1997

David Tahernia, resident, Orthopedic Surgery, 1996-1998

Alexandria Robinsky, Medical student, 1997

Sadi Abdus, Research Fellow, 1997

William Jaffe, Medical student, 1997

Heather Gullish, Medical student, 1996

Sachin Sachiada, Masters Student, Biomedical Engineering, 1996

Faruk Ficqbal, Undergraduate, Computer Science, 1994

Mentor of Post-doctoral Fellows and Junior Faculty:

Kelly Rock, Current Post-Doctoral Fellow 2023

Woo Taek Lim, Post-Doctoral Fellow, 2014-2015

Current Position: Assistant Professor and Director, Advanced Institute of Convergence Sports Rehabilitation, Woosong University, South Korea Ravneet Singh Vohra, Post-Doctoral Fellow, 2012-2015 (Co-Mentorship with Dr. Glenn Walter)

Current Position: Research Associate, Neurology, University of Washington

Rebecca Willcocks, Post-doctoral Fellow, 2011-2015

Current Position: Research Assistant Professor, Physical Therapy, University of Florida

Fan Ye, Post-doctoral Fellow, 2010-2012

Last known Position: Post-Doctoral Fellow, Applied Physiology and Kinesiology, University of Florida

Celine Baligand, (co-mentor), Post-doctoral Fellow, 2009- 2014

Current Position: Senior Researcher, Leiden University Medical Center, The Netherlands

Sean Forbes, Post-doctoral Fellow and Junior Faculty, 2008-2011

Current Position: Associate Professor, Physical Therapy, University of Florida

Mark Bishop, (co-mentor), Junior Faculty, 2008-2012

Current Position: Professor, Physical Therapy, University of Florida

Roxanna Bendixen, Junior Faculty, 2008-2014

Current Position: Associate Professor & Division Director, Occupational Therapy, MUSC

Funding: Rehabilitation Research Career Development Program

Min Liu, Post-doctoral Fellow, 2008-2010

Current Position: Senior Research Investigator, University of Pennsylvania

Donovan Lott, Post-doctoral Fellow and Junior Faculty, 2007-2008

Current Position: Research Associate Professor, Physical Therapy, University of Florida

Sunita Mathur, Post-doctoral Fellow, 2007-2008

Current Position: Associate Professor, Department of Physical Therapy, University of Toronto

Warren Dixon, Junior faculty, 2005-2008

Current Position: Professor, Department of Mechanical and Aerospace Engineering, University of Florida

Brian Ilfeld, Junior faculty, 2004-2007

Current Position: Professor, Director of Clinical Research, Department of Anesthesiology, University of California at San Diego

Chris Gregory, Post-doctoral Fellow, 2003-2006

Current Position: Associate Professor, Department of Health Sciences and Research, MUSC

Jennifer Stevens, Post-doctoral fellow, 2002-2005

Current Position: Professor, Department of Physical Therapy, University of Denver

Samuel Lee, Post-doctoral fellow, 1999-2000

Current Position: Associate Professor, Department of Physical Therapy, University of Delaware

Preceptor of the following PhD students:

Prathyusha Bellam, Graduate Student, Rehabilitation Science, 2021-Present

Kavya (Kamalamma) Nair, Graduate Student, Rehabilitation Science, 2016-2022
Dissertation Project: "Disease Progression in Duchenne Muscular Dystrophy with Emphasis on Loss of Ambulation: A Multicenter Longitudinal Study"
Current Position: Assistant Professor of Instruction, Department of Health and Rehabilitation Sciences, Temple University
Funding: UF Department of Physical Therapy Teaching Assistant

Alison Barnard, Graduate Student, Rehabilitation Science, 2014-2018

Dissertation Project: "Lower Extremity and Respiratory Muscle Magnetic Resonance Biomarkers in Duchenne Muscular Dystrophy: Relationships to Clinical Function and Effects of Genetic Modifiers"

Current Position: Researh Assistant Professor, Department of Physical Therapy, University of Florida

Funding: T32 Training grant

Umar Alabasi, Graduate Student, Rehabilitation Science, 2013-2018
Dissertation Project: "Assessment of Disease Progression in Upper and Lower
Extremity Muscles in Boys with Duchenne Muscular Dystrophy Using Magnetic
Resonance Imaging/Spectroscopy and Clinical Outcome Measures"
Current Position: Head of Physical Therapy Department at King AbdulAziz University,
Jeddah, Makkah, Saudi Arabia

Harneet Arora, Graduate Student, Rehabilitation Science, 2013-2017

Funding: Saudi Arabia Government Fellowship

Dissertation Project: "Examination of Disease Progression in Upper and Lower Limb Muscles in Boys with DMD Using Functional Clinical Endpoints and Magnetic Resonance Imaging"

Current Position: Postdoctoral Fellow, Physical Therapy, University of Florida Funding: Teaching Assistant, Research Assistant, Wellstone NIH training grant

Abhinandan Batra, Graduate Student, Rehabilitation Science, 2011-2017
Dissertation Project: "Non-Invasive Monitoring of Disease Progression in Duchenne Muscular Dystrophy & Collagen VI Myopathy"
Current Position: Postdoctoral Fellow, Physical Therapy, University of Florida
Funding: Alumni Fellowship, Wellstone NIH training grant

Steven Chrzanawski, Graduate Student, Interdisciplinary Program in Biomedical

Sciences, 2012-2016

(Co- Mentored with Dr. Glenn Walter)

Dissertation Project: "Therapeutic Intervention in Dystrophic Muscle"

Current position: Completing MD PhD program, University of Florida

Funding: T32 Training Grant

Brittany Lee, Graduate Student, Interdisciplinary Program in Biomedical Sciences, 2012-2016

(Co- Mentored with Dr. Glenn Walter)

Dissertation Project: "Metabolomic Analysis in Muscle Disease"

Current Position: Postdoctoral Fellow, Genetics, Stanford University

Funding: CTSI Predoctoral Training Program, T32 Training grant

Arjun Ruhella, Graduate Student, Rehabilitation Science, 2010-2013

Current Position: Not known

Funding: Alumni Fellowship – Transitioned to masters program.

Woo Taek Lim, Graduate Student, Rehabilitation Science, 2009-2014

Dissertation Project: "Muscle Plasticity in Contusion Spinal Cord Injury"

Current Position: Assistant Professor and Director, Advanced Institute of Convergence

Sports

Rehabilitation, Woosong University, South Korea

Funding: Alumni fellowship

Jasjit Deol, Graduate Student, Rehabilitation Science; Research Assistant, 2008-2012

Dissertation Project: "Qualitative Assessment of Disease Progression in boys with

Duchenne Muscular Dystrophy"

Current Position: Not known

Funding: Research Assistantship

Ishu Arpan, Graduate Student, Rehabilitation Science, 2008-2014

Dissertation Project: "T2 measures of muscle damage in boys with Duchenne Muscular Dystrophy"

Current Position: Post-Doctoral Associate, Physical Therapy, Oregon Health Science University

Funding: Alumni fellowship, Wellstone NIH training grant

Ravneet Singh Vohra, Graduate Student, Rehabilitation Science; Research Assistant, 2007-2012

Dissertation Project: "Non-invasive monitoring of disease progression in Duchenne Muscular Dystrophy"

Current Position: Research Associate, Neurology, University of Washington Funding: Research Assistantship

Nathan Bryant, Graduate Student, IDP in Biomedical Sciences, 2006-2010 (Co-mentored with Dr. Glenn Walter)

Dissertation Project: "Noninvasive Characterization of Skeletal Muscle Damage and Repair in Murine Models of Muscular Dystrophy Using a Multimodal Imaging Approach with MRI"

Last known Position: Post Doctoral Fellow, Vanderbilt University Funding: T32 training grant

Fan Ye, Graduate Student, Rehabilitation Science, 2005-2010

Dissertation Project: "Role of IGF-I to modulate muscle plasticity during limb disuse" Current Position: Post Doctoral Fellow, University of Florida, Department of Applied Physiology and Kinesiology

Funding: Alumni Fellowship

Arun Jayaraman, Graduate Student, Rehabilitation Science, 2003-2008

Dissertation Project: "Functional assessments and locomotor recovery in incomplete SCI"

Current Position: Director, Rehabilitation Technologies & Outcomes Lab; Rehabilitation Institute of Chicago and Associate Professor, Department of Physical Medicine and Rehabilitation Northwestern University

Funding during training:: Alumni fellowship, Outstanding International Student Award, Frederick RSD scholarship

Prithvi Shah, Graduate Student, Rehabilitation Science, 2004-2008

Dissertation Project: "Implementation of MRI to study skeletal muscle in patients with SCI"

Current Position: Assistant Professor, Physical Therapy, Stony Brook University Funding during training: Alumni fellowship, Outstanding International Student Award

Min Liu, Graduate Student, Rehabilitation Science, 2003-2006

Dissertation Project: "Muscle Plasticity following Spinal Cord Injury in Rats"

Current Position: Research Associate, University of Pennsylvania

Funding during training: Alumni fellowship, Outstanding International Student Award

Neeti Pathare, Graduate Student, Rehabilitation Science, 2002-2005

Dissertation Project: "Muscle adaptations following limb disuse"

Current Position: Associate Professor, Department of Physical Therapy, Russell Sage Colleges, Troy, New York

Funding during training: Alumni fellowship, Outstanding International Student Award, Frederick RSD scholarship

Tiffany (Frimel) Hilton, Graduate Student, Rehabilitation Science, 2001-2005

Dissertation Project: "Muscle atrophy and reloading in a mouse model"

Current Position: Associate Professor, Duke University Department of Physical

Therapy, Rochester, New York

Funding during training: ODS Level I Scholarship, Viva J. Erickson Scholarship, PODS Level II Scholarship, VA predoctoral fellowship

Current students

Prathyusha Bellam, Graduate Student, Rehabilitation Science, University of Florida, 2021-2025 (anticipated graduation date)

Member of Dissertation Committees:

Pratiksha Awale, Graduate Student, Rehabilitation Science, University of Florida, 2021-2025 (anticipated graduation date)

Cameron Miles, Doctoral Candidate, Rehabilitation Science, University of Florida, "Identification of Mechanisms and a Novel Therapeutic Intervention to Counter Cancer-associated Cachexia", 2019-2023 (anticipated graduation date)

Dominque DuBose, Doctoral Candidate, Rehabilitation Science, University of Florida, "The Effect of Sports-Related Concussion on Neuromuscular Function", 2014-2017

Stephen Chrzanowski, Hypertension T32 Fellowship, University of Florida, "Near Infrared Optical Imaging and Magnetic Resonance Characterization of Dystrophic and Damaged Muscle", 2013-2016

Brittany Lee, CTSA TL2, McKnight, Neuromuscular PlasticityT32 Fellowship, University of Florida. "A Metabolomics Approach to Investigate Disease Progression in Duchenne Muscular Dystrophy", 2013-2016

Brandon Roberts, Doctoral Candidate, Rehabilitation Science, University of Florida, "The Role of Fox01 during Cancer Cachexia", 2012-2016

Adam Beharry, Doctoral Candidate, Rehabilitation Science, University of Florida, "The Regulation of Fox01 via Histone Deacetylasis (Hdacs) during Cancer Cachexia", 2011-2015

Chao-Jung Hsu, Doctoral Candidate, Rehabilitation Science, University of Florida, "Impairments and Rehabilitation Outcomes in Patients with Traumatic Meniscal Tears and Meniscectomy", 2010-2014

Barbara K. Smith, Doctoral Candidate, Rehabilitation Science, University of Florida, "Respiratory Exercises and Diaphragm Myofiber Remodeling," 2007-2010

Joel Bialosky, Graduate Student, Rehabilitation Science, University of Florida, "Manipulation for Treatment of Lower Back Pain", 2004-2008

Darin Falk, Graduate Student, Health and Human Performance, University of Florida, "Mechanical Ventilation and Respiratory Muscles", 2003-2008

Ira Smith, Graduate Student, Health and Human Performance, University of Florida, "Calpain Activation during muscle atrophy", 2001-2005

Nicole Tester, Doctoral Candidate, Medical Sciences, University of Florida, "Effects of CS GAG Degradation on Motor Recovery Post-SCI", 2002-2006

David Russ, Doctoral Candidate, Biomechanics and Movement Science, University of Delaware, "Metabolic Optimization of Functional Electrical Stimulation", 1998-2001

Emad Al-Farra, Master's degree candidate Oral Biology, School of Dental Medicine, University of Pennsylvania "Magnetic Resonance Spectroscopy of the Masseter Muscle", 1997-1998

Training Mentor:

T-32- HD043730A "Interdisciplinary Training in Rehabilitation and Neuromuscular Plasticity", 2003-current (Director of Program)

T32- HL134621 "Breathing Research and Therapeutics, 2017-2022

K12 HD055929 Rehabilitation Research Career Development Program, K12 HD055929-08, 2007- 2022, (Deputy Director of Program)

NIH-HL07614-05 "Metabolic Magnetic Resonance Training," 1998-2001

T32-AR07584 "Training in Muscle Biology," 1998-2001

T32-HD07425 "Research Training in Neurologic Rehabilitation Grant," 1996-2001

Other Teaching Activities:

Academic Year 2022-2023

• RSD6930: Seminar Course: The Art of Scientific Dissemination

Academic Year 2020-2021

• RSD6930: Seminar Course: Special Topics

Academic Year 2018-2019

• RSD6930: Seminar Course: The Art of Scientific Dissemination

Academic Year 2016-2017

• RSD6930: Seminar Course: The Art of Scientific Dissemination

Academic Year 2014-2015

• PHT6935: Seminar Course: The Art of Scientific Dissemination

Academic Year 2011-2012

• RSD6935C: Doctoral Seminar in Rehabilitation Science

Academic Year 2009-2010

• PHT6935C: MRI and Muscle Analysis I

Academic Year 2007-2008

• PHT6935: Seminar Course: The Art of Scientific Dissemination

Academic Year 2006-2007

• PHT6935: Rehabilitation Seminar Course: The Art of Scientific Presentation

Academic Year 2005-2006

• Seminar Course: Magnetic Resonance I

• Seminar Course: Magnetic Resonance II: Muscle Analysis II

• PHT6935: Rehabilitation Seminar Course: The Art of Scientific Presentation

Academic Year 2004-2005

• Seminar Course: Magnetic Resonance I

• Seminar Course: Magnetic Resonance II: Muscle Analysis II

• Supervised Teaching

Academic Year 2003-2004

• Seminar Course: Magnetic Resonance I

• Seminar Course: Magnetic Resonance II: Muscle Analysis II

PHT6935: Rehabilitation Seminar Course: The Art of Scientific Presentation

Academic Year 2002-2003

- Advanced research Course, RSD Program
- Supervised Research, RSD program

Academic Year 1999-2000

Neurophysiology course

Physical Therapy and Physical education Program

Free University Brussels

Academic Year 1998-1999

Physiology course

Physical Therapy and Physical education Program

Free University Brussels

• Coordinator, Rehabilitation Medicine Research Seminars

Department of Rehabilitation Medicine,

University of Pennsylvania

Academic Year 1997-1998

• 993 MRS applications

Department of Rehabilitation Medicine,

University of Pennsylvania

• 998 Muscle Metabolism

Department of Rehabilitation Medicine,

University of Pennsylvania

Lectures by Invitation:

Mar 2023	"Givinostat in DMD: results of the Epidys Study with particular attention to MR measures of muscle fat fraction", MDA Clinical & Scientific Conference, Dallas, TX
Mar 2023	"MR Imaging Biomarkers in Duchenne Muscular Dystrophy", PhD in Rehabilitation Science, Seminar Series, Gainesville, FL
Jan. 2023	"MR Imaging & Muscular Dystrophies", Dyne Therapeutics Leadership Lunch & Learn, Waltham, MA
Jan. 2023	"Learnings of MR Imaging, Gene Therapy, and Clinical Trials", PPMD Early Healthcare Summit, New York City, NY
Dec. 2022	"MR Biomarkers for Becker Muscular Dystrophy", PPMD DDDR Meeting, Washington DC
Dec. 2022	"Quantitative MR in Multicenter Clinical Trials", PPMD DDDR Meeting, Washington DC
June 2022	"Looking Ahead to Combination Therapies: Once you have Dystrophin, What is Next?" PPMD Annual Conference, Scottsdale, AZ

June 2022 "Modeling MR Muscle Fat Fraction to Inform Clinial Trial Design in Duchenne", PPMD Annual Conference, Scottsdale, AZ June 2022 "Development of Imaging Biomarkers for Becker Muscular Dystrophy", PPMD Annual Conference, Scottsdale, AZ Nov. 2021 "Fit for Purpose Application to Develop a Clinical Trial Simulator Tool That Can Inform Data-driven, Simulations-based Decisions to Optimize Clinical Trial Design for DMD", FDA Pre-submission Decision Meeting. Oct. 2021 "MR Imaging Biomarkers for Clinical Trials in BMD &LGMD", GRASP Annual Meeting, Vriginia Commonwealth Dec. 2020 "PPMD's Biomarker Initiative: Levering Data for New Discoveries", Webinar with Parent Project Muscular Dystrophy Sept. 2020 "The New Era of Gene Transfar Therapies and Application to Duchenne Muscular Dystrophy and Limb Girdle Muscular Dystrophies", 25th International Congress of the World Muscle Society, Virtual Meeting. Feb. 2019 "The Role of Magnetic Resonance Imaging in the Pursuit of a treatment for Duchenne Muscular Dystrophy" University of Florida Faculty Senate, Gainesville, FL Dec. 2018 "Is Imaging Technology Sufficient to Provide Sensitive, Information and Predictive Data About Changes in Muscle Inflammation", Parent Project Muscular Dystrophy, Inflammation in Duchenne: Current Treatments and New Treatment Strategies, Washington DC Nov. 2017 "MR Biomarkers in Duchenne Clinical Trials", Imaging in Neuromuscular Disease 2017, Berlin, Germany Mar. 2017 "MR Imaging Biomarkers in Duchenne Muscular Dystrophy", Advances in Skeletal Muscle Biology in Health and Disease Conference, Gainesville, FL

July 2016	"MRI/MRS as a Biomarker for Duchenne Muscular Dystrophy", New Directions in Biology and Disease of Skeletal Muscle Conference, Orlando, FL
June 2016	"Clinical Trials in DMD: Role of qMR Imaging", Parent Project Muscular Dystrophy Annual Connect Conference, Orlando, FL
May 2016	"Biomarkers and Clinical Endpoints Across Different Stages of Disease Progression in DMD", Justus F. Lehmann Symposium, Seattle, WA
May 2016	"Clinical Trials in Duchenne Muscular Dystrophy: Role of MR Imaging", Justus F. Lehmann Symposium, Seattle, WA
Feb. 2016	"Upper Extremity MRI – What have we learned?" BioMarin Advisory Board Meeting, Novato, CA
Nov. 2015	"Imaging Biomarkers for the Muscular Dystrophies", Muscular Dystrophy Coordinating Committee (MDCC), NIH, Bethesda, MD
Aug. 2015	"Imaging DMD" Child Health Research Center Seminar/2015 Myology Course, the Research Institute at Nationwide Children's Hospital, Columbus, OH
June 2013	"Natural History and MRI as a Biomarker", Parent Project Muscular Dystrophy Annual Connect Conference, Baltimore, MD
June 2013	"The Role of Exercise in the Development and Use of an In Vivo Imaging System for Dystrophic Boys", ACSM Annual Meeting and World Congress on Exercise in Medicine, Indianapolis, IN
June 2013	"Potential Role for Magnetic Resonance in Clinical Trials in DMD", Department of Physiology Annual Retreat, University of Pennsylvania, PA

Apr. 2013 "Imaging as a Biomarker in NMDs", Muscular Dystrophy Association Meeting, Washington DC. Nov. 2012 "Skeletal Muscle MR endpoints in DMD", UC Davis NIDRR State of the Science conference, Washington DC Sept. 2012 "MRI in DMD", Muscle Study Group Meeting, Beaver Hollow, NY. June 2012 "Using MRI as a Biomarker for Duchenne", Parent Project Muscular Dystrophy Annual Connect Conference, Ft. Lauderdale, FL. Mar. 2012 "MRI and Biomarkers for Muscular Dystrophy", Parent Project Muscular Dystrophy; DuchenneConnect Webinar Series, March 14, 2012. http://community.parentprojectmd.org/video/imagingdmd-mri-studywebinar Sept. 2011 "Multicenter MR Imaging Study in Muscular Dystrophy: Informatics Support", Research Computing Day, University of Florida, Gainesville FL. Jan. 2011 "Translation to Clinical Studies in Muscular Dystrophies", CTSI seminar series, University of Florida, Gainesville, FL. Sept. 2010 "Magnetic Resonance Imaging - Biomarker Development in DMD". NIH/FDA Conference on Antisense Oligonucleotide Therapies in Neuromuscular Disease. Washington DC, District of Columbia. Sept. 2010 "How to Assess Muscle Quality in Boys with Duchenne Muscular Dystrophy". Muscle Biology/Physiology Seminar Series, University of Florida, Gainesville, FL. Sept. 2010 "Duchenne Muscular Dystrophy at UF". PHHP Advisory Board Meeting, University of Florida, Gainesville, FL.

Apr. 2010 "Magnetic Resonance Assessment of Muscle Quality - Outcome Measures". Rehabilitation Outcomes Research Center, Gainesville FL. Aug. 2009 "Magnetic Resonance Assessment of Muscle Quality". APTA Research Retreat, Monterey, CA. Feb. 2009 "Funded Research and Early Career Development Opportunities (K12) for Faculty Members". APTA, Combined Sections Meeting, Las Vegas, NV. Sept. 2008 "Magnetic Resonance and Duchenne Muscular Dystrophy". Rehabilitation Research Seminars, Department of Physical Therapy, University of Florida, Gainesville, FL July 2008 "MR as a Surrogate Outcome Measure in Duchenne Muscular Dystrophy". PPMD Meeting, Philadelphia, PA. May 2008 "Translational Models in Muscle Rehabilitation". Keynote Speaker Research Day, Department of Physical Therapy, University of Maryland, Baltimore, MD Feb. 2008 "A Translational Approach to Study Disuse Atrophy and Muscle Plasticity". Rehabilitation Research Seminars, Department of Physical Therapy, University of Florida, Gainesville, FL Dec. 2007 "Magnetic Resonance Imaging of Muscular Dystrophy." Free Radical meeting, Department of Applied Physiology and Kinesiology, University of Florida, Gainesville, FL Dec. 2007 "Magnetic Resonance Imaging of Muscular Dystrophy". National Institute for Arthritis and Musculosketal diseases, NIH, Bethesda, Washington DC. Nov. 2007 "Magnetic Resonance Imaging and Muscle Rehabilitation" University of British Columbia, Vancouver, Canada.

Aug. 2007 "Molecular Signatures Associated with Skeletal Muscle Disuse Atrophy in Humans", American College of Sports Medicine, National Conference, Denver, CO **June 2007** "Translational Models in the Study of Skeletal Muscle Dysfunction". In memoriam Gary Dudley, key note speaker. American College of Sports Medicine. New Orleans, LA May 2007 "Muscle Plasticity after Spinal Cord Injury", Keynote Speaker Research Day, Department of Physical Therapy, University of Maryland, Baltimore, MD June 2006 Moderated Session: "New Frontiers on Rehabilitation Research." APTA, Annual Conference, Orlando, FL June 2006 "Molecular Signatures Associate with Skeletal Muscle Disuse in Humans.", American College of Sports Medicine, National Conference, Denver, CO Oct. 2005 "Magnetic Resonance Assessment of Muscle Function: The Future", American College of Sports Medicine Workshop, Vanderbilt University, Nashville, TN Jan. 2005 "Muscle Plasticity following incomplete SCI.", First Annual Locomotor Recovery Retreat, Brooks Center, University of Florida, Gainesville, FL Jun. 2003 "Where does Physical Therapy fit in this era of genetics and genomics? What are the implications for practice, education, and research? ", American Physical Therapy Conference, Washington DC Apr. 2003 "Techniques and Tools to Assess Muscle Function.", RSD Research Seminar, University of Florida, Gainesville, FL Oct. 2002 "NIH-R01 grants: Practical tips.", College of Public Health and Health Professions, University of Florida, Gainesville, FL

Mar. 2002	"Research Efforts to study Muscle Disuse from Pathophysiology to Impairment.", RSD Research Seminar, University of Florida, Gainesville, FL
Jan. 2002	"Loss and Recovery of Muscle Function following Limb Disuse.", Higlighted Presentation, NIH-National Institute of Child Health and Human Development Advisory panel, Bethesda, Washington DC
Dec. 2001	"Muscle Atrophy and Rehabilitative Interventions.", Exercise Science and Sports Medicine, University of Florida, Gainesville, FL
Sept. 2001	"Muscle Dysfunction and Regeneration Following Limb Disuse.", NIH- NICHD Advisory panel, Bethesda, Washington DC
Feb. 2001	"Pathophysiology of muscle disuse.", Dept. of Physical Therapy, Washington University, St. Louis, MO
Oct. 2000	"Muscle degeneration and regeneration following disuse.", Dept. of Physiology, University of Pennsylvania, Philadelphia, PA
Oct. 2000	"Muscular atrophy and regeneration.", Biomedical Exercise Research Group, University of California Irvine, California
Aug. 2000	"Muscular rehabilitation: A pathophysiologcal approach.", Moss Rehabilitation Institute, Philadelphia, PA
May 2000	"Degeneration – Regeneration of Skeletal Muscle.", Dept. of Physical Medicine and Rehabilitation, Harvard Medical School, Boston, MA
Feb. 1999	"The Evaluation of Skeletal Muscle Following Disuse: Cast Immobilization As A Model." Eugene Michels Researcher's Forum, Seattle, WA

Feb. 1998	"Magnetic Resonance Imaging and Spectroscopy of Skeletal Muscle.", University of Delaware, Delaware
Feb. 1997	"Magnetic Resonance Spectroscopy." Beaver College, Pennsylvania
Sept. 1996	"Effects of Surgery and Cast Immobilization on Muscle Metabolism and Function.", European Society for Magnetic Resonance in Medicine and Biology, Tsjeche, Prague Republic
Apr. 1996	"Restoration of Muscle Function during Rehabilitation.", National Center for Medical Rehabilitation Research, NIH, Bethesda, MD
Jan. 1996	"Evaluation of Skeletal Muscle in Persian Gulf Veterans. ", New Jersey Medical School, East Orange, NJ
Jan. 1996	"Evaluation of Skeletal Muscle in Persian Gulf Veterans. ", New Jersey Medical School, East Orange, NJ
Nov. 1995	"Skeletal Muscle in Persian Gulf Veterans.", World Congress on Chronic Fatigue Syndrome, Brussels, Belgium
June 1994	"In Vivo Metabolic and Contractile Properties of Single Human Skeletal Muscles.", Joint Workshop: Magnetic Resonance Imaging and Spectroscopy of Muscle, Liverpool, England
Apr. 1994	"Localized Spectroscopy of Skeletal Muscle.", VA Medical Center, San Francisco, CA
Apr. 1994	"Spatial Localization of Skeletal Muscle during Exercise.", In Vivo Magnetic Resonance Spectroscopy Symposium: An Advanced Participation Workshop, California
Apr. 1993	"Phosphate Content in Fast and Slow Twitch Muscles.", Belgian Sports Medicine and Sports Science Conference, Belgium

- Sept. 1992 "Energy Rich Phosphates in Muscles with a Different Fiber Type Mixture using Localized NMR Spectroscopy.", American College of Sports Medicine Conference, Dallas, TX
- Sept. 1991 "Multiple pH Values in Individual Muscles.", Biochemistry of Exercise Conference, Japan
- Sept. 1991 "Muscle Metabolism in the Medial and Lateral Gastrocnemius Using a Simple Localization Procedure.", Biochemistry of Exercise Conference, Japan
- May 1991 "An Approach to Fiber Typing in Athletes and Non-athletes Using 31P-MRS.", American College of Sports Medicine Conference, Orlando, FL
- Oct. 1990 "New Horizons in Medical Magnetic Resonance." PRIMIS Symposium,
 Belgium Mar. 1991 "Non-Invasive Detection of Muscle Fiber Types a
 Tool for Event Selection in the Future?", International Symposium On:
 Running Science, Belgium
- Sept. 1990 "Non-Invasive Detection of Muscle Fiber Types in Man." Colloque Fatigue Musculaire, Cretail, France

Bibliography:

Research Publications, peer reviewed:

Accepted (7/24/2023): S. Kim, R. Willcocks, M. Daniels, J. Francisco Morales, D. Yoon, W. Triplett, A. Barnard, D. Conrado, V. Aggarwal, R. Belfiore-Oshan, T. Martinez, G. Walter, W. Rooney, and K. Vandenborne. Multivariate modeling of magnetic resonance biomarkers and clinical outcome measures for Duchenne muscular dystrophy clinical trials. CPT: Pharmacometrics & Systems Pharmacology. Paper #PSP-2023-0060R1

^{*} underlined name Indicates joint first authorship

^{**}Indicates graduate student mentored by Dr. Vandenborne

Accepted (1/9/2023): G. Pietro Comi, E. Niks, K. Vandenborne, C. Cinnante, H. E. Kan, R. Willcocks, D. Velardo, F. Magri, M. Ripolone, J. van Benthem, N. van de Velde, S. Nava, L. Ambrosoli, S. Cazzaniga, P. Bettica. Givinostat for Becker Muscular Dystrophy: A Randomized, Placebo-Controlled, Double Blind Study. J. Frontiers in Neurology. Manuscript ID: 1095121

Comi GP, Niks EH, **Vandenborne K**, Cinnante CM, Kan HE, Willcocks RJ, Velardo D, Magri F, Ripolone M, van Benthem JJ, van de Velde NM, Nava S, Ambrosoli L, Cazzaniga S, Bettica PU. Givinostat for Becker muscular dystrophy: A randomized, placebo-controlled, double-blind study. Front Neurol. 2023 Jan 30;14:1095121. doi: 10.3389/fneur.2023.1095121. PMID: 36793492; PMCID: PMC9923355.

Barnard AM, Hammers DW, Triplett WT, Kim S, Forbes SC, Willcocks RJ, Daniels MJ, Senesac CR, Lott DJ, Arpan I, Rooney WD, Wang RT, Nelson SF, Sweeney HL, **Vandenborne K**, Walter GA. Evaluating Genetic Modifiers of Duchenne Muscular Dystrophy Disease Progression Using Modeling and MRI. Neurology. 2022 Nov 22;99(21):e2406-e2416. doi: 10.1212/WNL.00000000000201163. Epub 2022 Sep 2. PMID: 36240102; PMCID: PMC9687406.

Nair KS, Lott DJ, Forbes SC, Barnard AM, Willcocks RJ, Senesac CR, Daniels MJ, Harrington AT, Tennekoon GI, Zilke K, Finanger EL, Finkel RS, Rooney WD, Walter GA, **Vandenborne K**. Step Activity Monitoring in Boys with Duchenne Muscular Dystrophy and its Correlation with Magnetic Resonance Measures and Functional Performance. J Neuromuscul Dis. 2022;9(3):423-436. doi: 10.3233/JND-210746. PMID: 35466946; PMCID: PMC9257666.

Batra A, Barnard AM, Lott DJ, Willcocks RJ, Forbes SC, Chakraborty S, Daniels MJ, Arbogast J, Triplett W, Henricson EK, Dayan JG, Schmalfuss C, Sweeney L, Byrne BJ, McDonald CM, **Vandenborne K**, Walter GA. Longitudinal changes in cardiac function in Duchenne muscular dystrophy population as measured by magnetic resonance imaging. BMC Cardiovasc Disord. 2022 Jun 9;22(1):260. doi: 10.1186/s12872-022-02688-5. PMID: 35681116; PMCID: PMC9185987.

Willcocks RJ, Barnard AM, Wortman RJ, Senesac CR, Lott DJ, Harrington AT, Zilke KL, Forbes SC, Rooney WD, Wang DJ, Finanger EL, Tennekoon GI, Daniels MJ, Triplett WT, Walter GA, **Vandenborne K**. Development of Contractures in DMD in Relation to MRI-Determined Muscle Quality and Ambulatory Function. J Neuromuscul Dis. 2022;9(2):289-302. doi: 10.3233/JND-210731. PMID: 35124659; PMCID: PMC9257436.

Comi GP, Niks EH, Cinnante CM, Kan HE, Vandenborne K, Willcocks RJ, Velardo D, Ripolone M, van Benthem JJ, van de Velde NM, Nava S, Ambrosoli L, Cazzaniga S, Bettica PU. Characterization of patients with Becker muscular dystrophy by histology, magnetic resonance imaging, function, and strength assessments. Muscle Nerve. 2022 Mar;65(3):326-333. doi: 10.1002/mus.27475. Epub 2021 Dec 30. PMID: 34918368; PMCID: PMC9302983.

Barnard AM, Lott DJ, Batra A, Triplett WT, Willcocks RJ, Forbes SC, Rooney WD, Daniels MJ, Smith BK, **Vandenborne K**, Walter GA. Characterizing Expiratory Respiratory Muscle Degeneration in Duchenne Muscular Dystrophy Using MRI. Chest. 2022 Mar;161(3):753-763. doi: 10.1016/j.chest.2021.08.078. Epub 2021 Sep 15. PMID: 34536384; PMCID: PMC9160975.

Finkel RS, Finanger E, **Vandenborne K**, Sweeney HL, Tennekoon G, Shieh PB, Willcocks R, Walter G, Rooney WD, Forbes SC, Triplett WT, Yum SW, Mancini M, MacDougall J, Fretzen A, Bista P, Nichols A, Donovan JM. Disease-modifying effects of edasalonexent, an NF-κB inhibitor, in young boys with Duchenne muscular dystrophy: Results of the MoveDMD phase 2 and open label extension trial. Neuromuscul Disord. 2021 May;31 (5):385-396. doi: 10.1016/j.nmd.2021.02.001. Epub 2021 Feb 4. PMID: 33678513.

Lott DJ, Taivassalo T, Cooke KD, Park H, Moslemi Z, Batra A, Forbes SC, Byrne BJ, Walter GA, **Vandenborne K**. Safety, feasibility, and efficacy of strengthening exercise in Duchenne muscular dystrophy. Muscle Nerve. 2021 Mar;63(3):320-326. doi: 10.1002/mus.27137. Epub 2020 Dec 22. PMID: 33295018; PMCID: PMC9254904.

Willcocks RJ, Forbes SC, Walter GA, Sweeney L, Rodino-Klapac LR, Mendell JR, **Vandenborne K**. Assessment of rAAVrh.74.MHCK7.micro-dystrophin Gene Therapy Using Magnetic Resonance Imaging in Children With Duchenne Muscular Dystrophy. JAMA Netw Open. 2021 Jan 4; 4(1):e2031851. doi: 10.1001/jamanetworkopen.2020.31851. PMID: 33394000; PMCID: PMC7783546.

Lott DJ, Taivassalo T, Senesac CR, Willcocks RJ, Harrington AM, Zilke K, Cunkle H, Powers C, Finanger EL, Rooney WD, Tennekoon GI, **Vandenborne K**. Walking activity in a large cohort of boys with Duchenne muscular dystrophy. Muscle Nerve. 2020 Nov 14. doi: 10.1002/mus.27119. Epub ahead of print. PMID: 33188573.

Senesac CR, Barnard AM, Lott DJ, Nair KS, Harrington AT, Willcocks RJ, Zilke KL, Rooney WD, Walter GA, **Vandenborne K**. Magnetic Resonance Imaging Studies in Duchenne Muscular Dystrophy: Linking Findings to the Physical Therapy Clinic. Phys Ther. 2020 Oct 30;100(11):2035-2048. doi: 10.1093/ptj/pzaa140. PMID: 32737968; PMCID: PMC7596892.

Batra A, Lott DJ, Willcocks R, Forbes SC, Triplett W, Dastgir J, Yun P, Reghan Foley A, Bönnemann CG, **Vandenborne K**, Walter GA. Lower Extremity Muscle Involvement in the Intermediate and Bethlem Myopathy Forms of COL6-Related Dystrophy and Duchenne Muscular Dystrophy: A Cross-Sectional Study. J Neuromuscul Dis. 2020 Sept 18; 7(4):407-417. doi: 10.3233/JND-190457. PMID: 32538860.

Goemans N, Signorovitch J, Sajeev G, Yao Z, Gordish-Dressman H, McDonald CM, **Vandenborne K**, Miller D, Ward SJ, Mercuri E; investigators from PRO-DMD-01 Study, CINRG DNHS, ImagingDMD, and the DMD Italian Group. Suitability of external controls for drug evaluation in Duchenne muscular dystrophy. Neurology. 2020 Sep 8;95(10):e1381-e1391. doi: 10.1212/WNL.000000000010170. Epub 2020 Jul 1. PMID: 32611643; PMCID: PMC7538219.

Arora H*, Willcocks RJ, Lott DJ, Harrington AT, Senesac CR, Zilke KL Daniels M Tennekoon G, Finanger E, Russman B; Finkel, RS Triplett, WT, Byrne B, Walter GA **Vandenborne K**. Longitudinal timed function tests in Duchenne muscular dystrophy: ImagingDMD cohort natural history. Muscle Nerve 2018 May 9. doi: 10.1002/mus.26161. [Epub ahead of print] PubMed PMID: 29742798.

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Willcocks RJ**, Forbes SC, Finanger EL, Russman B, Lott DJ, Senesac CR, Triplett WT, Daniels MJ, Byrne BJ, Finkel RS, Tennekoon GI, Rooney WD, Walter GA, Sweeney HL, **Vandenborne K.** Magnetic resonance imaging and spectroscopy detect changes with age, corticosteroid treatment, and functional progression in DMD. World Muscle Society, Asilomar, CA Oct 1-5, 2013.

Finanger EL, Pollaro J, Russman B, Lott DJ, Byrne BJ, Finkel RS, Tennekoon GI, Forbes SC, Walter GA, **Vandenborne K**, Rooney WD. MRI Measures of Bone in Duchenne Muscular Dystrophy. World Muscle Society, Asilomar, CA Oct 1-5, 2013.

Lim W*, Baligand C**, Ye F, Ruhella A, Vohra RS**, Keener J, Bose P, Thompson F, Walter GA, **Vandenborne K**. White matter integrity after severe contusion spinal cord injury under different levels of activity. National Neurotrauma Symposium, Nashville, TN, August 2013.

Baligand C**, Lee-McMullen BA*, Forbes SC, Chrzanowski SM*, **Vandenborne K**, Byrne BJ, Walter GA. Muscle metabolic signature in a mouse model of Pompe disease identified by 13C and 31P NMR spectroscopy. Presented at Muscular Dystrophy Association Annual Conference, Washington DC, April 2013 (poster presentation).

Forbes SC, Vohra R**, Batra A, **Vandenborne K**, Walter GA. Sildenafil citrate attenuates T2 the increase in skeletal muscle T2 following downhill running in mdx mice. Presented at Muscular Dystrophy Association Annual Conference, Washington DC, April 2013 (poster presentation).

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Baligand C**, Triplett W, Forbes SC, Willcocks R**, Lott DJ, Vos Soren de, Pollaro J, Rooney W, Sweeney HL, Bönnemann C, **Vandenborne K**, Walter GA. Chemical shift based imaging to measure fat fractions in dystrophic skeletal muscle. Proc. Intl. Soc. Magn. Reson. Med. 21:3519 (2013). Salt Lake City, Utah, April 20-26, 2013.

Rooney W, Forbes S, Triplett W, Wang DJ, Vos S de, Pollaro J, Meyer J, Willcocks R**, Byrne B, Finkel R, Russman B, Sweeney HL, Walter GA, **Vandenborne K.** Water T2 Values in Duchenne Muscular Dystrophy: Associations with Age and Corticosteroid Treatment. Proc. Intl. Soc. Magn. Reson. Med. 21:689, 2013. Salt Lake City, Utah, April 20-26, 2013.

Forbes SC, Walter GA, Rooney WD, Wang DJ, DeVos S, Pollaro J, Triplett W, Lott DJ, Willcocks RJ**, Senesac C, Daniels MJ, Byrne B, Russman B, Finkel R, Meyer JS, Sweeney HL, **Vandenborne K**. Reproducibility of Skeletal Muscle MR measures in Children: A Multi-Center Study of Duchenne Muscular Dystrophy. Proc. Intl. Soc. Magn. Reson. Med. 21:1633 (2013). Salt Lake City, Utah, April 20- 26, 2013.

Chrzanowski SM*, Lapa ME, Triplett WT, Forbes SC, Lott DJ, De Vos S, Willcocks R**, Nicholson TR, Sweeney HL, Bonnemann CG, Byrne BJ, **Vandenborne K**, Walter GA. Magnetic Resonance Spectroscopy of Collagen VI Myopathies and Duchenne Muscular Dystrophy. 2013 ASCI/AAP/ASPA Joint Meeting. Chicago, IL. April 26-28, 2013.

Willcocks RJ**, Finanger EL, Russman BS, Lott DJ, Forbes SC, Senesac C, Wu X, Triplett WT, Harrington AT, Daniels MJ, Byrne BJ, Finkel RS, Rooney WD, Tennekoon GI, Walter GA, Sweeney HL, **Vandenborne K**. Magnetic resonance measures of muscle physiology significantly predict functional performance in boys with Duchenne Muscular Dystrophy. MDA's Scientific Conference 2013, Washington DC, April 21-24, 2013.

Batra A, Lott DJ, Willcocks RJ**, Forbes SC, William T, Dastgir J, Sweeney L, Bonnemann CG, Byrne B, Rooney W, Senesac C, Wang DJ, **Vandenborne K**, Walter G. Cross sectional and contractile area comparison in children with Duchenne muscular dystrophy and Collagen VI myopathy. MDA's Scientific Conference 2013, Washington DC, April 21-24, 2013.

Arpan I, Willcocks RJ**, Forbes SC, Lott DJ, Senesac C, Triplett WT, Daniels MJ, Byrne BJ, Finanger EL, Finkel RS, Russman BS, Rooney WD, Tennekoon GI, Walter GA, Sweeney HL, **Vandenborne K**. MR supports the therapeutic effect of corticosteroids in 5-7 year old boys with DMD. MDA's Scientific Conference 2013, Washington DC, April 21-24, 2013.

Lim W*, Baligand C**, Ye F, Vohra RS**, Ruhella A, Keener J, Bose P, Thompson F, Walter GA, **Vandenborne K.** Spinal Cord Changes after Treadmill Training in a Rat Model of Severe Contusion Injury. College of Public Health and Health Professions Research Day. Gainesville, FL, April 16, 2013. (poster presentation)

Willcocks RJ**, Lott, DJ, Forbes SC, Triplett WT, **Vandenborne K**, Walter GA. Leg MR images show similarities in identical twins with Duchenne muscular dystrophy. College of Public Health and Health Professions Research Day. Gainesville, FL, April 16, 2013. (poster presentation)

Chrzanowski SM*, Lapa ME, Lee-McMullen BA*, Triplett WT, Forbes SC, Lott DJ, Baligand C**, De Vos S, Willcocks R**, Nicholson TR, Sweeney HL, Bonnemann CG, Byrne BJ, **Vandenborne K**, Walter GA. Muscle Biochemistry of Collagen VI Deficient and Duchenne Muscular Dystrophy Patients' Upper and Lower Legs. College of Public Health and Health Professions Research Day. Gainesville, FL, April 16, 2013. (poster presentation)

Batra A, Lott DJ, Willcocks RJ**, Forbes SC, Triplett W, **Vandenborne K**, Walter G. Comparison of muscular changes in children with Duchenne muscular dystrophy and collage VI myopathy. College of Public Health and Health Professions Research Day. Gainesville, FL, April 16, 2013. (poster presentation)

Arpan I, Willcocks RW**, Forbes SC, Lott DJ, Senesac CR, Triplett WT, Rooney WD, Wang DJ, Walter GA, **Vandenborne K**. MRS supports therapeutic effects of corticosteroids in 5-7 year old boys with DMD, College of Public Health and Health Professions Research Day. Gainesville, FL, April 16, 2013. (poster presentation)

Lim W*, Baligand C**, Ye F, Vohra RS**, Ruhella A, Keener J, Bose P, Thompson F, Walter GA, **Vandenborne K**. Assessment of Spinal Cord Structural Integrity by Diffusion Tensor Imaging Following Severe Contusion SCI. 8th Annual Neuromuscular Plasticity Symposium. Gainesville, FL, March 15, 2013. (poster presentation)

Willcocks RJ**, Lott DJ, Forbes SC, Senesac C, Triplett WT, Wu X, Rooney WR, Daniels D, Walter GA, **Vandenborne K**. Magnetic resonance measures of muscle physiology significantly predict functional performance in boys with Duchenne Muscular Dystrophy. 8th Annual Neuromuscular Plasticity Symposium. Gainesville, FL, March 15, 2013. (poster presentation)

Chrzanowski SM*, Lapa ME, Triplett WT, Forbes SC, Lott DJ, Baligand C**, De Vos S, Willcocks R**, Nicholson TR, Sweeney HL, Bonnemann CG, Byrne BJ, **Vandenborne K**, Walter GA. Magnetic Resonance Spectroscopy of Collagen VI Deficient and Duchenne Muscular Dystrophy Patients' Upper and Lower Legs. 8th Annual Neuromuscular Plasticity Symposium. Gainesville, FL, March 15, 2013. (poster presentation)

Batra A, Forbes SC, Vohra R**, Arpan I, Triplett B, Cools-Lartigue B, Lott DJ, Senesac C, Willcocks R**, Walter G, Vandenborne K. Atrophy Vs. Hypertrophy in Skeletal Muscles of Duchenne Muscular Dystrophy. 8th Annual Neuromuscular Plasticity Symposium, University of Florida, Gainesville, FL, March 15, 2013. (poster presentation)

Arpan I, Willcocks RW**, Forbes SC, Lott DJ, Senesac CR, Triplett WT, Rooney WD, Wang DJ, Walter GA, **Vandenborne K**. Assessment of impact of early initiation of corticosteroid therapy on lower extremity muscles in DMD using MRI and MRS. 8th Annual Neuromuscular Plasticity Symposium. Gainesville, FL, March 15, 2013. (poster presentation)

Lim W*, Baligand C**, Keener J, Ye F, Vohra RS**, Ruhella A, Bose P, Thompson F, Walter GA, **Vandenborne K**. Morphological and structural changes in rat spinal cord after severe contusion injury. University of Florida Graduate Student Research Day Conference. Gainesville FL, October 23, 2012.(poster presentation)

Batra A, Forbes SC, Vohra R**, Arpan I, Triplett W, Rooney WD, Wang DJ, Lott D, Senesac C, Walter GA, **Vandenborne K**. Contractile area changes in muscles of DMD subjects with age cross-sectional study. University of Florida Graduate Student Research Day Conference. Gainesville FL, October 23, 2012. (poster presentation)

Arpan I, Forbes SC, Willcocks R**, Lott DJ, Senesac CR, Triplett WT, Rooney WD, Wang DJ, Walter GA, **Vandenborne K**. Impact of early initiation of corticosteroid therapy on lower extremity muscles in Duchenne muscular dystrophy, Graduate Student Research Day, University of Florida, Gainesville FL, October 23, 2012. (poster presentation)

Forbes SC, Baligand C**, Vohra R**, **Vandenborne K**, Walter GA. Neuronal nitric oxide synthase- deficient mice have slower phosphocreatine recovery kinetics and reduced microvascular response following muscle contractions. New Directions in Biology and Disease of Skeletal Muscle Conference, New Orleans, Louisiana, June 17-21, 2012 (poster presentation).

Willcocks RJ**, Arpan I, Forbes SC, Lott DJ, Senesac CR, Senesac E, Walter GA, **Vandenborne**, **K**. Longitudinal changes in MRI transverse relaxation time in boys with Duchenne muscular dystrophy. New Directions in Biology and Disease of Skeletal Muscle Conference, New Orleans LA, June 17-21, 2012.

Rooney W, Forbes SC, Pollaro J, Wang DJ, de Vos S, Triplett W, Meyer J, Willcocks R**, Byrne B, Finkel R, Russman B, Sweeney HL, Walter GA, **Vandenborne K.** Water T2 Values are Elevated in Duchenne Muscular Dystrophy Independent of Fat Infiltration. ISMRM Annual Meeting, Proc. Intl. Soc. Magn. Reson. Med, Melbourne, Australia, May 1-7, 2012.

Gonzalez-Rothi EJ, Rombola A, Fernandez L, Daly A, Rousseau CA, Federico RA, O'Steen BE, **Vandenborne K**, Reier PJ, Fuller DD, Lane MA. Forelimb neuroplasticity following incomplete cervical spinal cord injury in adult rats. American Society for Neural Therapy and Repair Conference. Clearwater Beach, FL. April 26-28, 2012.

Lim W*, Baligand C**, Keener J, Ye F**, Vohra RS*, Ruhella A, Bose P, Walter GA, Thompson F, **Vandenborne K**. MRI and DTI Characterization of Spinal Cord Severe Contusion Injury in the Rat. Experimental Biology, San Diego CA, April 21-25, 2012.

Rundall A, Senesac C, Lott DJ, **Vandenborne K**, Bendixen R**. Effective Health Measures for Boys with Duchenne Muscular Dystrophy. Public Health and Health Professions (PHHP) Research Day, University of Florida, Gainesville FL, April 18, 2012.

Vohra RS*, Lott DJ, Mathur S, Germain SA, Senesac C, Walter GA, **Vandenborne K.**Magnetic Resonance assessment of Lower Leg muscles in Duchenne Muscular
Dystrophy. Public Health and Health Professions (PHHP) Research Day, University of Florida, Gainesville FL, April 18, 2012.

Lim W*, Baligand C**, Keener J, Ye F**, Vohra RS*, Ruhella A, Bose P, Thompson F, Walter GA, **Vandenborne K**. MR characterization of the spinal cord in a severe contusion injury rat model. Public Health and Health Professions (PHHP) Research Day, University of Florida, Gainesville FL, April 18, 2012.

Kaufman ML, Lott DJ, Arpan I, Forbes S, Isreal N, Senesac C, Walter GA, Vandenborne K. T2 Relaxation Time and Activity in Boys with Duchenne Muscular Dystrophy. Public Health and Health Professions (PHHP) Research Day, University of Florida, Gainesville FL, April 18, 2012. (poster presentation)

Deol JK, Baligand C**, Willcocks R**, Wilson D, Senesac C, Lott DJ, deVos S, Walter GA, **Vandenborne K**. MRI grading and functional ability in Duchenne Muscular Dystrophy. Public Health and Health Professions (PHHP) Research Day, University of Florida, Gainesville FL, April 18, 2012.

Batra A, Lott DJ, Deol JK, Senesac C, Bendixen R**, Arpan I, Walter GA, **Vandenborne K**. Strength & functional ability in children with Duchene Muscular Dystrophy. Public Health and Health Professions (PHHP) Research Day, University of Florida, Gainesville FL, April 18, 2012.

Ye F**, Baligand C**, Vohra RS*, Lim W*, Ruhella A, Keener J, Deol JK, Senesac E, Bose P, Walter GA, Thompson F, **Vandenborne K**. Reponses to treadmill training following severe spinal cord injury in a rat model. Neuromuscular Plasticity Symposium, University of Florida, Gainesville FL, March 16, 2012.

Willcocks RJ**, Arpan I, Forbes SC, Lott DJ, Senesac, CR, Senesac E, Walter GA, **Vandenborne K**. Longitudinal changes in measures of T2 heterogeneity in boys with DMD. Neuromuscular Plasticity Symposium, University of Florida, Gainesville FL, March 16, 2012.

Vohra RS*, Lott DJ, Mathur S, Senesac C, Deol J, Walter G A, **Vandenborne K**. Relationship between non-contractile component and functional measurements of lower leg muscles in Duchenne muscular dystrophy. Neuromuscular Plasticity Symposium, University of Florida, Gainesville FL, March 16, 2012.

Ruhella, A, Baligand C**, Lim W*, Keener J, Ye F**, Vohra RS**, Bose P, Walter GA, Thompson F, **Vandenborne K**. Characterization of a severe contusion spinal cord injury model using MRI. Neuromuscular Plasticity Symposium, University of Florida, Gainesville FL, March 16, 2012.

Lim W*, Baligand C**, Ye F**, Keener J, Vohra RS*, Ruhella A, Bose P, Walter GA, Thompson F, **Vandenborne K**. Atrophy and asymmetry in a new spinal cord injury rat model. Neuromuscular Plasticity Symposium, University of Florida, Gainesville FL, March 16, 2012.

Gonzalez-Rothi EJ, Rombola A, Fernandez L, Alappattu M, Daly A, Rousseau CA, Federico RA, O'Steen BE, **Vandenborne K**, Reier PJ, Fuller DD, Lane MA. Neuromuscular and Functional Plasticity in the Rat Forelimb Following Incomplete Cervical Spinal Cord Injury. Neuromuscular Plasticity Symposium, University of Florida, Gainesville FL, March 16, 2012.

Deol JK, Baligand C**, Willcocks R, Wilson D, Senesac C, Lott DJ, deVos S, Walter GA, **Vandenborne K**. MRI grading and functional ability in Duchenne Muscular Dystrophy. Neuromuscular Plasticity Symposium, University of Florida, Gainesville FL, March 16, 2012.

Batra A, Lott DJ, Deol JK, Senesac C, Bendixen R**, Arpan I, Walter GA, **Vandenborne K**. Strength & functional ability in children with Duchene Muscular Dystrophy. Neuromuscular Plasticity Symposium, University of Florida, Gainesville FL, March 16, 2012.

Baligand C**, Ye F**, Keener J, Forbes S, Vohra R*, Bose P, Walter GA, Thompson F, **Vandenborne K**. In vivo assessment of muscle bioenergetics in a new rat model of disuse. Neuromuscular Plasticity Symposium, University of Florida, Gainesville FL, March 16, 2012.

Arpan I, Forbes SC, Lott DJ, Senesac CR, Senesac E, De Vos S, Walter GA, **Vandenborne K**. T2 distribution analysis provides multiple approaches to characterize muscle involvement in Duchenne Muscular Dystrophy. Neuromuscular Plasticity Symposium, University of Florida, Gainesville FL, March 16, 2012.

Ye F**, Chen YW, Gregory C, Harafuji N, Lott D, Lai SH, Mathur S, Shi RY, Scarborough M, Gibbs P, Baligand C**, **Vandenborne K**. Molecular pathways associated with immobilization and subsequent rehabilitation in patients with ankle fracture. Advances in Skeletal Muscle Biology in Health & Disease, Gainesville FL, February 22-24, 2012.

Willcocks, RJ**, Arpan, I, Forbes, SC, Lott, DJ, Senesac, CR, Walter, GA, **Vandenborne, K.** Longitudinal changes in skeletal muscle MRI T2 relaxation time in boys with Duchenne muscular dystrophy. Advances in Skeletal Muscle Biology in Health and Disease, University of Florida, Gainesville, FL, February 22-24, 2012.

Lim W*, Baligand C**, Keener J, Ye F**, Vohra RS*, Ruhella A, Bose P, Thompson F, Walter GA, **Vandenborne K**. MRI and DTI characterization of spinal cord severe contusion injury in the rat. Advances in Skeletal Muscle Biology in Health and Disease, University of Florida, Gainesville, FL, February 22-24, 2012.

Forbes SC, Baligand C**, Vohra R*, **Vandenborne K**, Walter GA. Effect of lack of nNOS on phosphocreatine recovery kinetics following muscle contractions. Advances in Skeletal Muscle Biology in Health and Disease, University of Florida, Gainesville, FL, February 22-24, 2012.

Baligand C**, Ye F**, Keener J, Forbes SC, Vohra R*, Bose P, Walter GA, Thompson F, **Vandenborne K**. In vivo Assessment of Muscle Bioenergetics in a new rat model of disuse. Advances in Skeletal Muscle Biology in Health and Disease, University of Florida, Gainesville, FL, February 22-24, 2012.

Triplett, WT, Baligand C**, Forbes SC, Willcocks R**, Lott DJ, DeVos S, Pollaro J, Rooney W, **Vandenborne K**, Walter, GA. Chemical Shift-based imaging to estimate fat fraction in dystrophic skeletal muscle. Accepted for presentation at the International Society for Magnetic Resonance in Medicine (ISMRM) Workshop on Fat-Water Separation, Long Beach CA, February 19-22, 2012. (poster presentation)

Ye F**, Mathur S, Liu M, Borst SE, Walter GA, Sweeney HL, **Vandenborne K**. Insulin like growth factor-I (IGF-1)'s role in skeletal muscle plasticity. American College of Sports Medicine Southeast Chapter Annual Meeting, Jacksonville FL, February 9-11, 2012.

Vohra RS*, Lott DJ, Mathur S, Germain S, Senesac C, Deol J, Walter GA, Vandenborne K. Quantitative Magnetic Resonance assessment of Lower Leg muscles in Duchenne Muscular Dystrophy. American Physical Therapy Association Combined Sections Meeting, Chicago, IL, February 8-12, 2012.

Senesac C, Lott DJ, Mathur S, Germain S, Deol J, Arpan I, Senesac C, Forbes SC, Walter GA, **Vandenborne K**. Longitudinal Changes in-Magnetic Resonance Evaluation of Muscle Composition in Boys with Duchenne Muscular Dystrophy- A case series. American Physical Therapy Association Combined Sections Meeting, Chicago, IL, February 8-12, 2012.

Lott, DJ, Willcocks, R**, Tokay Harrington, A, Zilke, K, Senesac, C, Finkel, R, Russman, B, Sweeney, HL, **Vandenborne**, **K**. Relationship between Functional Assessments and the Six-minute Walk Test in Boys with Duchenne Muscular Dystrophy. American Physical Therapy Association Combined Sections Meeting, Chicago, IL, February 8-12, 2012.

Lim W*, Baligand C**, Keener JE, Ye F**, Vohra RS*, Ruhella A, Bose P, Walter GA, Thompson FJ, **Vandenborne K**. Asymmetry in Hindlimb Muscle Atrophy Following Spinal Cord Injury and Cast Immobilization in Rats. American Physical Therapy Association Combined Sections Meeting, Chicago, IL, February 8-12, 2012.

Gonzalez-Rothi EJ, Fuller DD, Federico RA, **Vandenborne K**, Reier PJ, Lane MA. Upper extremity neuromuscular plasticity following high cervical spinal cord injury. American Physical Therapy Association Combined Sections Meeting Program, Chicago, IL, February 8-11, 2012.

Arpan, I, Forbes, SC, Lott, DJ, Senesac, C, De Vos, S, Senesac, E, Triplett, W, Walter, GA, **Vandenborne**, **K.** Assessment of soleus muscle involvement in children with Duchenne muscular dystrophy (DMD) using T2 mapping. American Physical Therapy Association Combined Sections Meeting, Chicago, IL, February 8-12, 2012.

Forbes SC, Vohra R*, Ye F**, **Vandenborne K**, Walter GA. Effect of Uphill running on myocardium T2 in mdx mice. Society of Cardiovascular Magnetic Resonance 15th Annual Meeting, Orlando, FL, February 2-5, 2012.

Forbes SC, Barton ER, Bish LT, Ye F**, Spinazzola J, Baligand C**, Plant D, Zeng H, Plant D, Vandenborne K, Sweeney HL, Walter GA. Gene transfer of arginine kinase to skeletal muscle monitored with 31P-MRS: A comparison of adeno-associated virus and adenovirus delivery methods. ISMRM Scientific Workshop on MRI-Based Cell Tracking, Miami Beach Florida, January 29- February 1, 2012.

Gonzalez-Rothi EJ, Federico RA, Daly A, Rombola A, O'Steen BE, **Vandenborne K**, Reier PJ, Fuller DD, Lane MA. Neuromuscular plasticity in the rat forelimb after high cervical spinal cord injury. 14th International Symposium on Neural Regeneration Program. Pacific Grove, CA, December 7-11 2011.

Gonzalez-Rothi EJ, Fuller DD, Federico RA, **Vandenborne K**, Reier PJ, Lane MA. Neuromuscular plasticity in the rat forelimb after high cervical spinal cord injury. Society for Neuroscience, Neuroscience 2011, Washington DC, November 12-16, 2011.

Buford TW, Lott DJ, Marzetti E, Wohlgemuth SE, **Vandenborne K**, Pahor M, Leeuwenburgh C, Manini TM. Aging of lower extremity compartments and their associations with physical function in older adults. Gerontological Society of America Annual Scientific Meeting, Boston MA, November 18-21, 2011.

Forbes SC**, Walter GA, Rooney WD, Wang DJ, DeVos S, Pollaro J, Triplett W, Lott DJ Senesac C, Daniels MJ, Willcocks RJ**, Byrne B, Russman B, Finkel R, Sweeney HL, **Vandenborne K**. Design of a Multi- center Study to Examine Skeletal Muscles of Children with Duchenne Muscular Dystrophy using MRI/MRS. World Muscle Society meeting, Algarve, Portugal, October 2011.

Baligand C**, Ye F**, Keener J, Vohra RS*, Lim W*, Ruhella A, Bose P, Walter GA, Thomson F, **Vandenborne K.** A New Rat Model of Spinal Cord Injury Without Muscle Reloading: Morphological and Functional Assessment by MR Imaging and 31P Spectroscopy. National Neurotrauma Symposium 2011, Fort Lauderdale, FL, July 10-13, 2011:PO69.

Lott DJ, Crawford R, Forbes SC**, Senesac C, Walter GA, **Vandenborne K**. Longitudinal Assessment of Activity, Muscle Composition, and Functional Ability in Children with Duchenne muscular dystrophy. American College of Sports Medicine Annual Meeting, Denver, CO, May 31- June 4, 2011.

Rooney WD, Pollaro J, Forbes SC**, Wang DJ, **Vandenborne K**, Walter GA. Application of the Extended Phase Graph Technique to Improve T2 Quantitation Across Sites. Proc. Intl. Soc. Mag. Reson. Med. 19: 138, 2011, International Society of Magnetic Resonance Meeting (ISMRM), Montreal, Canada, May 7-13, 2011.

Forbes SC**, Bish LT, Barton ER, Ye F**, Baligand C**, **Vandenborne K**, Sweeney HL, Walter GA. Gene transfer of arginine kinase to skeletal muscle using adeno-associated virus. Proc. Intl. Soc. Mag. Reson. Med. 19: 1150, 2011, International Society of Magnetic Resonance Meeting (ISMRM), Montreal, Canada, May 7-13, 2011.

Forbes SC**, Bish LT, Sleeper MM, Mai W, **Vandenborne K**, Sweeney HL, Walter GA. AAV6-mediated delivery of a U7 exon skipping construct improves regional cardiac function in Golden Retriever muscular dystrophy dogs. Proc. Intl. Soc. Mag. Reson. Med. 19: 1313, 2011, International Society of Magnetic Resonance Meeting (ISMRM), Montreal, Canada, May 7-13, 2011.

Baligand C**, Vohra RS*, Ye F, Keener J, Lim W**, Forbes SC**, Shah PK, Bose P, Walter GA, Thompson F, **Vandenborne**, **K**. Morphological and metabolic characterization of a new model of spinal cord injury without reloading using 1H MRI and 31P NMR spectroscopy. Proc. Intl. Soc. Mag. Reson. Med. 19:1143, 2011, The International Society for Magnetic Resonance in Medicine (ISMRM) Annual Meeting, Montreal Canada, May 7-13, 2011.

Ye F**, Baligand C**, Vohra R*, Keener J, Bose P, Walter G, Thompson F, **Vandenborne K**. Skeletal muscle deficits following spinal cord injury in a new rat model, Experimental Biology, Washington, D.C., April 9-14, 2011.

Lott DJ, Urcuyo J, Senesac C, Deol J, **Vandenborne K**. Longitudinal Assessment of Physical Activity in Children with Duchenne Muscular Dystrophy. American Physical Therapy Association Combined Sections Meeting, New Orleans, LA, Feb 2011.

Arpan I, Forbes SC**, Lott DJ, Germain S, Senesac E, De Vos S, Senesac C, Walter GA, **Vandenborne K**. Comparison of MRI proton transverse relaxation time among lower leg muscles of children with Duchenne muscular dystrophy, American Physical Therapy Association Combined Sections Meeting, New Orleans, LA, February 2011.

Deol JK, Schmalfuss I, Lott DJ, Mathur S, Senesac C, Germain SA, Walter GA, **Vandenborne K**. Muscle pathology and functional ability in children with duchenne muscular dystrophy. Annual Conference of the American College of Sports Medicine, Baltimore, MD, June 2010.

Arpan I, Forbes SC**, Lott DJ, Germain SA, Sukumar M, Senesac C, Walter GA, **Vandenborne K.** Distribution of T2 in the soleus muscle of children with Duchenne muscular dystrophy. Annual Conference of the American College of Sports Medicine, Baltimore, MD, June 2010.

Akima H, Deol JK, Germain SA, Senesac C, Lott DJ, Bendixen R**, Walter GA, **Vandenborne K**. Skeletal muscle contractile and non-contractile components in boys with Duchenne muscular dystrophy by MRI. The 57th Annual Meeting of American College of Sports Medicine (Baltimore, MD, USA), June 2010.

Lott DJ, Senesac C, Urcuyo J, Deol J, Arpan I, Senesac E, **Vandenborne 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 S, Lott DJ, Senesac C, **Vandenborne K**, Walter GA. NNLS Analyses of Skeletal Muscle T2 in children with Duchenne muscular dystrophy. Presented at the American College of Sports Medicine, Baltimore, Maryland, June, 2010 (poster presentation).

Liu M**, Ye F**, Jayaraman A, Shah P, Walter GA, Bose P, Thompson FJ, **Vandenborne K**. The Effect of IGF-I Overexpression in Skeletal Muscle Following Spinal Cord Injury and Locomotor Training American College of Sports Medicine (ACSM) Washington DC, June 2010.

Forbes SC**, Wickham S, **Vandenborne K**, Mai W, Bish LT, Morine KJ, Walter GA, Sleeper MM, Sweeney HL. MRI evaluation of systemic myostatin inhibition in skeletal muscle of Golden Retriever muscular dystrophy dogs. Presented at The Ottawa Conference on New Directions in Biology and Disease of Skeletal Muscle, Ottawa, Ontario, May, 2010 (poster presentation).

Vohra RS*, Mathur S., Germain SA, Forbes S**, Bryant ND*, **Vandenborne K**, Walter GA. Altered muscle MRI characteristics after downhill and horizontal running exercise in mdx mice. New Directions in Skeletal Muscle Biology. Poster Presentation. May 2010, Ottawa, Canada.

Bendixen R**, Senesac C, Lott D, Deol J, **Vandenborne K**. Impact of Muscle Dysfunction on Physical Activity and Self-Assessment of Participation in Children with Duchenne Muscular Dystrophy. American Occupational Therapy Association 2010 Annual Meeting, Orlando, FL, April 28-May 2, 2010.

Bendixen R**, Senesac C, Lott D, Deol J, **Vandenborne K**. Impact of Muscle Dysfunction on Self-Report of Participation and Quality of Life in Boys with Duchenne Muscular Dystrophy. American Physical Therapy Association Combined Sections Meeting, San Diego, CA, February 17-20, 2010 (interactive poster presentation).

Vohra RS*, Mathur S, **Vandenborne K**, Walter GA. Quantification and localization of acute muscle damage using MRI in Duchenne muscular dystrophy. Poster Presentation. APTA, Combined Sections Meeting, February 2010.

Lott DJ, Senesac C, Mathur S, Deol JK, Germain SA, Walter GA, **Vandenborne K**. Longitudinal examination of non-invasive measures of muscle pathology in children with Duchenne muscular dystrophy. APTA, Combined Sections Meeting, Februar 2010.

Deol JK, Schmalfuss I, Lott DJ, Mathur S, Senesac C, Germain SA, Walter GA, **Vandenborne**, **K**. Magnetic resonance imaging as a qualitative assessment tool of muscle pathology in children with duchenne muscular dystrophy. APTA, Combined Sections Meeting, February 2010.

Mathur S, Vohra RS*, **Vandenborne K.**, Walter G.A. Regional differences in muscle damage following eccentric exercise in Duchenne muscular dystrophy. Applied Physiology, Nutrition, and Metabolism. Volume 34 (Suppl 1), S62. 2009. Canadian Society of Exercise Physiology, Vancouver, Nov 11-14, 2009 (platform).

Liu M**, Ye F*, Jayaraman A, Shah P, Walter GA, Bose P, Thompson FJ, **Vandenborne K.** The potential synergistic effect of IGF-I modulation and locomotor training in promoting muscle plasticity following spinal cord injury Neuroscience Annual Meeting, Chicago IL October 2009.

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