

UNIVERSITY OF FLORIDA
Department of Physical Therapy
COLLEGE OF PUBLIC HEALTH AND HEALTH PROFESSIONS
Curriculum Vitae
July 2018

Krista Vandenborne, PhD

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Education:

1984-1988 Licentiate Physical Therapy and Motoric Revalidation
Free University of Brussels, Brussels, Belgium

1988-1993 Ph.D. Physical Therapy
Free University of Brussels, Brussels, Belgium

Postgraduate Training and Fellowship Appointments:

1988-1989 Research Fellow, Sports Medicine
Department of Human Physiology
Free University of Brussels, Brussels, Belgium

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

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

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, Philadelphia

1993-1994 NIH-T32 Post-Doctoral Fellow, Neurorehabilitation
Department of Rehabilitation Medicine
University of Pennsylvania, Philadelphia

Faculty Appointments:

1994-1999	Research Assistant Professor Department of Rehabilitation Medicine University of Pennsylvania, Philadelphia
1997-1999	Visiting Professor Department of Sports Medicine Free University Brussels, Belgium
1998-1999	Chair of Research Department of Rehabilitation Medicine University of Pennsylvania, Philadelphia
1998-2001	Research Assistant Professor Department of Radiology (Secondary appointment) University of Pennsylvania, Philadelphia
1999-2001	Research Assistant Professor Department of Physiology (Primary appointment) University of Pennsylvania, Philadelphia
2001-2002	Associate Professor (Tenured) Department of Physical Therapy University of Florida, Gainesville
2002-2007	Chair & Associate Professor Department of Physical Therapy University of Florida, Gainesville
2003-2005	Associate Director for Human Imaging Advanced Magnetic Resonance Imaging and Spectroscopy Center University of Florida, Gainesville
2007 -	Chair & Professor Department of Physical Therapy University of Florida, Gainesville
2007-2010	Research Foundation Professor University of Florida, Gainesville
2009- 2012	Associate Dean for Research and Planning College of Public Health and Health Professions University of Florida, Gainesville
2012 -	Director, Neuromuscular Research and Programs, College of Public Health and Health Professions University of Florida, Gainesville

Specialty Certification:

1988	Licentiate in Physical Therapy and Motoric Revalidation
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Licensure: Belgium

Awards, Honors and Membership in Honorary Societies:

1988	Summa Cum Laude, Licentiate in Physical Therapy and Motoric Revalidation
1989	Fulbright Award, Belgian American Educational Foundation Fellow
1990-1992	Fellowship of the Belgian National Funds for Scientific Research
1992	Fellowship for long study periods in a foreign country (NFWO)
1992-1994	Fellowship of the Belgian National Funds for Scientific Research
1993	Summa Cum Laude, Ph.D. in Physical Therapy and Motoric Revalidation
1994	Scientific Astra-Prize from the Belgian Association of Sports Medicine and Sports Science
1994	McCabe Fund Pilot Project Award
1995	NIH FIRST Award (R29-HD33738)
1995	First NCMRR funded T-32 fellow to receive funding as independent investigator
1996	APTA: <i>Eugene Michels Researcher's Forum</i> speaker
1998	Member of the Pennsylvania Muscle Institute
1999	Associate Member, Institute for Human Gene Therapy, University of Pennsylvania
2003-	Member, National High Magnetic Field Laboratory
2007-2010	Research Foundation Professor
2011	Member, NINDS Neuromuscular Diseases (NMD) Pediatric CDE Working Group, National Institutes of Health

Memberships in Professional and Scientific Societies:**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

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)

Editorial Positions:

1996- Ad hoc Reviewer for American Journal of Applied Physiology
 1996- Ad hoc Reviewer for Journal of Gerontology: Biological Sciences
 1999- Reviewer for Magnetic Resonance in Medicine

- 1999- Ad hoc Reviewer for Exercise & Sports Science Reviews
- 2000- Ad hoc Reviewer for NMR in Biomedicine
- 2000- Ad hoc Reviewer for Acta Physiologica Scandinavia
- 2002- Ad hoc Reviewer for Physical Therapy
- 2008- Ad hoc Reviewer for Applied Physiology

Reviewer in scientific committees and member of scientific advisor boards:

- 1999- NIH: Ad hoc Reviewer Chronic Fatigue Syndrome study section
- 2000 NASA: Reviewer Nutrition, Physical Fitness Rehabilitation study section
- 2000-2002 NIH: Ad hoc reviewer Geriatrics and Rehabilitation Medicine study section
- 2000 Ad hoc reviewer Moss Rehabilitation Research Institute
- 2003 Reviewer Special Emphasis Panel: Molecular and Cellular Basis of Contractures of the Design of Therapeutic Interventions
- 2004-2006 NIH: Ad hoc reviewer: Skeletal Muscle and Exercise Physiology study section
- 2004-2008 Ad hoc Reviewer: Special Emphasis Panel-ZHD1 DSR-T BMS
- 2005-2009 Permanent Reviewer: "Function, Integration and Rehabilitation Sciences Subcommittee" NIH study section.
- 2006 Chair Special Emphasis panel Session (August 2006): ZHD1 DSR-T BMS.
- 2007 External Reviewer, University of Maryland- School of Medicine – Department of Physical Therapy and Rehabilitation Science
- 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
- 2009 Scientific Reviewer, Duchenne Parent Project, The Netherlands
- 2010 Scientific Reviewer, Duchenne Parent Project, The Netherlands
- 2011 Ad hoc Reviewer, Ancillary Studies to Large Ongoing Clinical Projects
- 2011/08 Council ZAR1 CHW M1 1, National Institutes of Health
- 2011 Member, NINDS Neuromuscular Diseases (NMD) Pediatric CDE Working Group, National Institutes of Health
- 2011 External Reviewer, University of Iowa- Department of Physical Therapy and Rehabilitation Science
- 2011-2015 Ad hoc Reviewer, Skeletal Muscle Biology and Exercise Physiology study section (SMEP)
- 2012 Ad hoc Grant Reviewer for Princes Beatrix Fonds
- 2013 Grant Reviewer, NIH/NIAMS Musculoskeletal Biology P30 Grants
- 2016 University of Alabama – Center for Exercise Medicine - External Advisory Panel

Principal Investigator of Grants (Direct cost):

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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, Eli Lilly & Co., 2013-2015, \$233,742 (Principal Investigator)

Active grants:

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)

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

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

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

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

Magnetic Resonance Imaging and Biomarkers for Muscular Dystrophy, NIH/ NIAMS /NINDS R01 AR056973, 2010-2020, \$6,915,979 (Principal Investigator)

Rehabilitation Research Career Development Program, K12 HD055929-08, 2007-2022, \$2,525,177 (deputy Director and PI on subcontract,)

Co-PI on Grants (Direct cost):

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

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

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)

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

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

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).

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

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

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

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

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)

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)

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)

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)

Active grants:

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

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)

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)

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

Mentor/Sponsor on Grants (Direct cost):

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)

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

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

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

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

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

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

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

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

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

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).

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.

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)

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

MRI assessment of cardiac structure and function in muscular dystrophies. American Heart Association Greater Southeast Affiliate Postdoctoral Fellowship, 2010-2012, \$96,476 (PI: Sean Forbes)

MRI/MRS Evaluation of Muscle Function and Treatment Strategies in Pompe Disease, Muscular Dystrophy Association (MDA218585), 2012-2015, \$170,873 (PI: C. Baligand)

MRI Evaluation of Skeletal Muscle Vascular Function in Patients with Nonalcoholic Fatty Liver Disease. Research Opportunity Seed Fund, University of Florida. 2014- 2016, \$84,000, (PI: Sean Forbes)

Active grants:

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)

Consultant on Grants (Direct cost):

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

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

Academic Committees:

1997 Member, Review Committee, Pennsylvania Muscle Institute
1998-1999 Chair, Research Committee, Department of Rehabilitation Medicine
1999 Member, Faculty- 2000, Special Opportunities Working group.
2002 Member, Leadership Committee, College of Public Health and Health Professions
2007 External Reviewer, Department of Physical Therapy, University of Maryland
2007-2008 Chair, Biomedical Research Program, University of Florida Opportunity Fund
2008 External Reviewer, University of Delaware
2008 Grant Reviewer, Washington University Grant Review
2009 Member, PHHP Dean Search Committee, University of Florida
2009 Member, College of Medicine Dean Search Committee, University of Florida
2010 Member, VA BRRC Director Search Committee, VA Medical Center/University of Florida
2010-2011 Member, College of Engineering, Chair of Biomedical Engineering Search 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
2011 Member, College of Public Health and Health Professions, PhD Review Committee, University of Florida
2011-2013 Member, UF CTSI Executive Operations Committee
2011-2012 Member, College of Education, Associate Dean for Research Search Committee, University of Florida
2014 Member, Metabolomics Preeminent Recruitment Committee
2015 Member, Director of Bachelor of Public Health Search Committee

- 2014-2015 Member, Neuroscience and Brain Preeminent Recruitment Committee
- 2015-2016 Chair, Occupational Therapy Department Chair Search Committee
- 2009-2017 Member, UF-CTSI, KL2 Multidisciplinary Advisory Committee.
- 2002- Member College of Public Health and Health Professions Executive Committee

Major Teaching and Research Training Activities:

Supervision of students and research fellows:

- Faruk Ficqbal, Undergraduate, Computer Science, 1994
- Sachin Sachiada, Masters Student, Biomedical Engineering, 1996
- Heather Gullish, Medical student, 1996
- William Jaffe, Medical student, 1997
- Sadi Abdus, Research Fellow, 1997
- Alexandria Robinsky, Medical student, 1997
- David Tahernia, resident, Orthopedic Surgery, 1996-1998
- William Luchetti, resident, Orthopedic Surgery, 1996-1997
- Naveen Ramineni, Medical student, 1998
- William Shull, research fellow, Rehabilitation Medicine, 1995
- Emad Al-Farre, Masters Student, Oral Biology, 1997-1998
- Richard Williams, Graduate Student, 1997-998
- Matthew Muskett, Undergraduate, Biology, 1998-1999
- David Russ, Graduate Student, Biomechanics and Movement Science, 1998
- Chris Gregory, Graduate Student, 1996-1999
- Mark Kurish, Undergraduate, Biology, 1998-1999
- Peter Yeh, Undergraduate, Electrical Engineering, 1999
- Fatema Kapadia, Masters Student, Physical Therapy, 2002-2004
- Kayla Vallerand, Undergraduate Student 2004-2005
- Patty Hovis, Graduate Student, Physical Therapy, 2008
- Robyn Hinds, Undergraduate Student, College of PHHP Honors Program, 2008-2009
- Alicia Kinsey, Undergraduate Student, College of PHHP Honors Program, 2008-2009
- Jacqueline Urcuyo, Undergraduate Student, College of PHHP Honors Program, 2009-2010
- Stephanie Wickham, Undergraduate Student, College of PHHP Honors Program, 2009-2010
- Nicholas Israel-Stahre, Undergraduate Student, College of HHP, Applied Physiology and Kinesiology, 2010-2011
- Steven Svoboda, High School Student, UF-Student Science Training Program, Florida Alliance Scholar, 2010-2011
- Emelie Grady, Undergraduate Student, College of HHP, Applied Physiology and Kinesiology, 2012
- Mario Beltran, Undergraduate Student, College of HHP, Applied Physiology and Kinesiology, 2012

Mentor of Post-doctoral Fellows and Junior Faculty:

Samuel Lee, Post-doctoral fellow, 1999-2000

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

Jennifer Stevens, Post-doctoral fellow, 2002-2005

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

Chris Gregory, Post-doctoral Fellow, 2003-2006

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

Brian Ilfeld, Junior faculty, 2004- 2007

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

Warren Dixon, Junior faculty, 2005- 2008

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

Sunita Mathur, Post-doctoral Fellow, 2007-2008

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

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

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

Min Liu, Post-doctoral Fellow, 2008-2010

Last Position known: Post-doctoral Associate, University of Pennsylvania

Roxanna Bendixen, Junior Faculty, 2008- 2014

Current Position: Assistant Professor, Occupational Therapy, University of Pittsburgh

Funding: Rehabilitation Research Career Development Program

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

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

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

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

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

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

Fan Ye, Post-doctoral Fellow, 2010- 2012

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

Rebecca Willcocks, Post-doctoral Fellow, 2011-2015

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

Ravneet Singh Vohra, Post-Doctoral Fellow, 2012-2015 (Co-Mentorship with Dr. Glenn Walter)

Current Position: Research Associate, Neurology, University of Washington

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

Current Position: Assistant Professor and Director, Advanced Institute of Convergence Sports Rehabilitation, Woosong University, South Korea

Preceptor of the following PhD students:

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: PODS Level I Scholarship, Viva J. Erickson Scholarship, PODS Level II Scholarship, VA predoctoral fellowship

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

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

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

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

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

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

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

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

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

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

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

Current Position: Not known

Funding: Alumni Fellowship – Transitioned to masters program.

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

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

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

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

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

Current students

Umar Alabasi, Graduate Student, Rehabilitation Science, 2013-
Funding: Saudi Arabia Government Fellowship

Alison Barnard, Graduate Student, Rehabilitation Science, 2014-
Funding: T32 Training grant

Kavya Kamalamma, Graduate Student, Rehabilitation Science, 2016-
Funding: UF Department of Physical Therapy Teaching Assistant

Member of Dissertation Committees:

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

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

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

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

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

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

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

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

Brittany Lee – CTSA TL2, McKnight, Neuromuscular Plasticity T32 Fellowship, University of Florida. "A Metabolomics Approach to Investigate Disease Progression in Duchenne Muscular Dystrophy", 2013-2016

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

Adam Beharry, Doctoral Candidate, Rehabilitation Science, University of Florida, "The Regulation of FoxO1 via Histone Deacetylation (Hdacs) during Cancer Cachexia", 2011-2015

Brandon Roberts, Doctoral Candidate, Rehabilitation Science, University of Florida, "The Role of FoxO1 during Cancer Cachexia", 2012-2016

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

Training Mentor:

- T32-HD07425 "Research Training in Neurologic Rehabilitation Grant, " 1996-2001
- T32-AR07584 "Training in Muscle Biology, " 1998-2001
- NIH-HL07614-05 "Metabolic Magnetic Resonance Training, " 1998-2001
- 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)

Other Teaching Activities

Academic Year 1997-1998

- 993 MRS applications
Department of Rehabilitation Medicine,
University of Pennsylvania
- 998 Muscle Metabolism
Department of Rehabilitation Medicine,
University of Pennsylvania

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 1999-2000

- Neurophysiology course
Physical Therapy and Physical education Program
Free University Brussels

Academic Year 2002-2003

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

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 2004-2005

- Seminar Course: Magnetic Resonance I
- Seminar Course: Magnetic Resonance II: Muscle Analysis II
- Supervised Teaching

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 2006-2007

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

Academic Year 2007-2008

- PHT6935: Seminar Course: The Art of Scientific Dissemination

Academic Year 2009-2010

- PHT6935C: MRI and Muscle Analysis I

Academic Year 2011-2012

- RSD6935C: Doctoral Seminar in Rehabilitation Science

Academic Year 2014-2015

- PHT6935: Seminar Course: The Art of Scientific Dissemination

Academic Year 2016-2017

- RSD6930: Seminar Course: The Art of Scientific Dissemination

Lectures by Invitation:

- Sept. 1990 "Non-Invasive Detection of Muscle Fiber Types in Man."
Colloque Fatigue Musculaire, Cretail, France
- 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
- May 1991 "An Approach to Fiber Typing in Athletes and Non-athletes Using ³¹P-MRS.", American College of Sports Medicine Conference, Orlando, Florida
- Sept. 1991 "Muscle Metabolism in the Medial and Lateral Gastrocnemius Using a Simple Localization Procedure.", Biochemistry of Exercise Conference, Japan
- Sept. 1991 "Multiple pH Values in Individual Muscles.", Biochemistry of Exercise Conference, Japan
- Sept. 1992 "Energy Rich Phosphates in Muscles with a Different Fiber Type Mixture using Localized NMR Spectroscopy.", American College of Sports Medicine Conference, Dallas, Texas
- Apr. 1993 "Phosphate Content in Fast and Slow Twitch Muscles. ", Belgian Sports Medicine and Sports Science Conference, Belgium
- Apr. 1994 "Spatial Localization of Skeletal Muscle during Exercise. ", *In Vivo* Magnetic Resonance Spectroscopy Symposium: An Advanced Participation Workshop, California

- Apr. 1994 "Localized Spectroscopy of Skeletal Muscle. ", VA Medical Center, San Francisco, California
- June 1994 "*In Vivo* Metabolic and Contractile Properties of Single Human Skeletal Muscles. ", Joint Workshop: Magnetic Resonance Imaging and Spectroscopy of Muscle, Liverpool, England
- Nov. 1995 "Skeletal Muscle in Persian Gulf Veterans. ", World Congress on Chronic Fatigue Syndrome, Brussels, Belgium
- Jan. 1996 "Evaluation of Skeletal Muscle in Persian Gulf Veterans. ", New Jersey Medical School, East Orange, New Jersey
- Apr. 1996 "Restoration of Muscle Function during Rehabilitation. ", National Center for Medical Rehabilitation Research, NIH, Bethesda, Maryland
- 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
- Feb. 1997 "Magnetic Resonance Spectroscopy." Beaver College, Pennsylvania
- Feb. 1998 "Magnetic Resonance Imaging and Spectroscopy of Skeletal Muscle.", University of Delaware, Delaware
- Feb. 1999 "The Evaluation of Skeletal Muscle Following Disuse: Cast Immobilization As A Model." Eugene Michels Researcher's Forum, Seattle, Washington
- May 2000 "Degeneration – Regeneration of Skeletal Muscle.", Dept. of Physical Medicine and Rehabilitation, Harvard Medical School, Boston, Massachusetts
- Aug. 2000 "Muscular rehabilitation: A pathophysiological approach.", Moss Rehabilitation Institute, Philadelphia, Pennsylvania
- Oct. 2000 "Muscular atrophy and regeneration.", Biomedical Exercise Research Group, University of California Irvine, California
- Oct. 2000 "Muscle degeneration and regeneration following disuse.", Dept. of Physiology, University of Pennsylvania, Philadelphia, Pennsylvania
- Feb. 2001 "Pathophysiology of muscle disuse.", Dept. of Physical Therapy, Washington University, St. Louis.
- Sept. 2001 "Muscle Dysfunction and Regeneration Following Limb Disuse.", NIH- NICHD Advisory panel, Bethesda, Washington DC
- Dec. 2001 "Muscle Atrophy and Rehabilitative Interventions.", Exercise Science and Sports Medicine, University of Florida, Gainesville, Florida
- Jan. 2002 "Loss and Recovery of Muscle Function following Limb Disuse.", Highlighted Presentation, NIH-National Institute of Child Health and Human Development Advisory panel, Bethesda, Washington DC

- Mar. 2002 "Research Efforts to study Muscle Disuse from Pathophysiology to Impairment.", RSD Research Seminar, University of Florida, Gainesville, Florida
- Oct. 2002 "NIH-R01 grants: Practical tips.", College of Public Health and Health Professions, University of Florida, Gainesville, Florida
- Apr. 2003 "Techniques and Tools to Assess Muscle Function.", RSD Research Seminar, University of Florida, Gainesville, Florida
- 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
- Jan. 2005 "Muscle Plasticity following incomplete SCI. ", First Annual Locomotor Recovery Retreat, Brooks Center, University of Florida, Gainesville, Florida
- Oct. 2005 "Magnetic Resonance Assessment of Muscle Function: The Future", American College of Sports Medicine Workshop, Vanderbilt University, Nashville
- June 2006 "Molecular Signatures Associate with Skeletal Muscle Disuse in Humans.", American College of Sports Medicine, National Conference, Denver, Colorado
- June 2006 Moderated Session: "New Frontiers on Rehabilitation Research." APTA, Annual Conference, Orlando, Florida
- May 2007 "Muscle Plasticity after Spinal Cord Injury", Keynote Speaker Research Day, Department of Physical Therapy, University of Maryland, Baltimore
- 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.
- Aug. 2007 "Molecular Signatures Associated with Skeletal Muscle Disuse Atrophy in Humans", American College of Sports Medicine, National Conference, Denver, Colorado
- Nov. 2007 "Magnetic Resonance Imaging and Muscle Rehabilitation" University of British Columbia, Vancouver, Canada.
- Dec. 2007 "Magnetic Resonance Imaging of Muscular Dystrophy". National Institute for Arthritis and Musculoskeletal diseases, NIH, Bethesda, Washington DC.
- Dec. 2007 Magnetic Resonance Imaging of Muscular Dystrophy. Free Radical meeting, Department of Applied Physiology and Kinesiology, University of Florida.
- Feb. 2008 "A translational Approach to Study Disuse Atrophy and Muscle Plasticity". Rehabilitation Research Seminars, Department of Physical Therapy, University of Florida.
- May 2008 "Translational Models in Muscle Rehabilitation". Keynote Speaker Research Day, Department of Physical Therapy, University of Maryland, Baltimore

- July 2008 "MR as a Surrogate Outcome Measure in Duchenne Muscular Dystrophy". PPMD Meeting, Philadelphia, Pennsylvania.
- Sept. 2008 "Magnetic Resonance and Duchenne Muscular Dystrophy". Rehabilitation Research Seminars, Department of Physical Therapy, University of Florida
- Feb. 2009 "Funded Research and Early Career Development Opportunities (K12) for Faculty Members". APTA, Combined Sections Meeting, Las Vegas, Nevada.
- Aug. 2009 "Magnetic Resonance Assessment of Muscle Quality". APTA Research Retreat, Monterey, California.
- April 2010 "Magnetic Resonance Assessment of Muscle Quality - Outcome Measures". Rehabilitation Outcomes Research Center, Gainesville FL.
- Sept. 2010 "Duchenne Muscular Dystrophy at UF". PPHP Advisory Board Meeting, University of Florida, Gainesville FL.
- 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 "Magnetic Resonance Imaging - Biomarker Development in DMD". NIH/FDA Conference on Antisense Oligonucleotide Therapies in Neuromuscular Disease. Washington DC, District of Columbia.
- Jan. 2011 "Translation to Clinical Studies in Muscular Dystrophies", CTSI seminar series, University of Florida, Gainesville, FL.
- Sept. 2011 "Multicenter MR Imaging Study in Muscular Dystrophy: Informatics Support", Research Computing Day, University of Florida, Gainesville FL.
- March 2012 "MRI and Biomarkers for Muscular Dystrophy", Parent Project Muscular Dystrophy; DuchenneConnect Webinar Series, March 14, 2012.
<http://community.parentprojectmd.org/video/imagingdmd-mri-study-webinar>
- June 2012 "Using MRI as a Biomarker for Duchenne", Parent Project Muscular Dystrophy Annual Connect Conference, Ft. Lauderdale, FL.
- Sept. 2012 "MRI in DMD", Muscle Study Group Meeting, Beaver Hollow, NY.
- Nov. 2012 "Skeletal Muscle MR endpoints in DMD", UC Davis NIDRR State of the Science conference, Washington DC
- April 2013 "Imaging as a Biomarker in NMDs", Muscular Dystrophy Association Meeting, Washington DC.
- June 2013 "Potential Role for Magnetic Resonance in Clinical Trials in DMD", Department of Physiology Annual Retreat, University of Pennsylvania, Philadelphia

- 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 "Natural History and MRI as a Biomarker", Parent Project Muscular Dystrophy Annual Connect Conference, Baltimore, MD
- Aug. 2015 "Imaging DMD" Child Health Research Center Seminar/2015 Myology Course, the Research Institute at Nationwide Children's Hospital, Columbus OH
- Nov. 2015 "Imaging Biomarkers for the Muscular Dystrophies", Muscular Dystrophy Coordinating Committee (MDCC), NIH, Bethesda, MD
- Feb. 2016 "Upper Extremity MRI – What have we learned?" BioMarin Advisory Board Meeting, Novato, California
- May 2016 "Clinical Trials in Duchenne Muscular Dystrophy: Role of MR Imaging", Justus F. Lehmann Symposium, Seattle, WA
- May 2016 "Biomarkers and Clinical Endpoints Across Different Stages of Disease Progression in DMD", Justus F. Lehmann Symposium, Seattle, WA
- June 2016 "Clinical Trials in DMD: Role of qMR Imaging", Parent Project Muscular Dystrophy Annual Connect Conference, Orlando, FL
- July 2016 "MRI/MRS as a Biomarker for Duchenne Muscular Dystrophy", New Directions in Biology and Disease of Skeletal Muscle Conference, Orlando, FL
- March 2017 "MR Imaging Biomarkers in Duchenne Muscular Dystrophy", Advances in Skeletal Muscle Biology in Health and Disease Conference, Gainesville, FL
- Nov. 2017 "MR Biomarkers in Duchenne Clinical Trials", Imaging in Neuromuscular Disease 2017, Berlin, Germany

Bibliography:

Research Publications, peer reviewed:

- Joos E, De Meirleir K, **Vandenborne K**, Neirinck P. 31P magnetic resonance muscle spectroscopy in fibromyalgia. *J Rheumatol.* 1993; 20(11):1985-6. PMID: 8179665
- McCully KK, Kakihira H, **Vandenborne K**, Kent-Braun J. Noninvasive measurements of activity-induced changes in muscle metabolism. *J Biomech.* 1991; 24(Suppl 1):153-61

- Vandenborne K, McCully K, Kakihira H, Prammer M, Bolinger L, Detre J, De Meirleir K, Walter G, Chance B, Leigh JS. Metabolic heterogeneity in human calf muscle during maximal exercise. *Proc Natl Acad Sci USA*. 1991; 88(13):5714-18
- McCully K, **Vandenborne K**, De Meirleir K, Posner J, Leigh JS. Muscle metabolism in track athletes, using ^{31}P magnetic resonance spectroscopy. *Can J Physiol Pharmacol*. 1992; 7(10):1353-9
- Vandenborne K, Walter G, Leigh JS, Goelman G. pH heterogeneity during exercise in localized spectra from single human muscles. *Am J Physiol*. 1995; 268(4 Pt 1):C869-76
- Vandenborne K, Walter G, Ploutz-Snyder L, Staron R, Fry A, De Meirleir K, Dudley GA, Leigh JS. Energy-rich phosphates in slow and fast human skeletal muscle. *Am J Physiol*. 1995 Apr; 268(4 Pt 1):C869-76. PMID: 7733235
- Walter G, **Vandenborne K**, McCully KK, Leigh JS. Noninvasive measurement of phosphocreatine recovery kinetics in single human muscles. *Am J Physiol*. 1997 Feb; 272(2 Pt 1):C525-34. PMID: 9124295
- Elliott MA, Walter GA, Gulish H, Sadi AS, Lawson DD, Jaffe W, Insko EK, Leigh JS, Vandenborne K. Volumetric measurement of human calf muscle from MRI. *Magma*. 1997 Jun; 5(2):93-8. PMID: 9268071
- Greenman RL, Elliott MA, **Vandenborne K**, Schnall MD, Lenkinski RE. Fast imaging of phosphocreatine using a RARE pulse sequence. *Magn Reson Med*. 1998 May; 39(5):851-4. PMID: 9581617
- Vandenborne K, Elliott MA, Walter GA, Abdus S, Okereke E, Shaffer M, Tahernia D, Esterhai JL. Longitudinal study of skeletal muscle adaptations during immobilization and rehabilitation. *Muscle Nerve*. 1998 Aug; 21(8):1006-12. PMID: 9655118
- De Becker P, Dendale P, De Meirleir K, Campine I, **Vandenborne K**, Hagers Y. Autonomic testing in patients with chronic fatigue syndrome. *Am J Med*. 1998 Sep 28; 105(3A):22S-26S. PMID: 9790478
- Elliott MA, Walter GA, Swift A, **Vandenborne K**, Schotland JC, Leigh JS. Spectral quantitation by principle-component analysis using complex singular value decomposition. *Magn Reson Med*. 1999 Mar; 41(3):450-5. PMID: 10204865
- Walter G, **Vandenborne K**, Elliott M, Leigh, JS. In vivo ATP synthesis rates in single human muscles during high-intensity exercise. *J Physiol (London)*. 1999 Sep 15; 519 Pt 3:901-10. PMID: 10457099
- Vandenborne K, Walter G, Ploutz-Snyder L, Dudley G, Elliott MA, De Meirleir K, Leigh JS. Relationship between muscle T2 relaxation properties and metabolic state: a combined localized ^{31}P -spectroscopy and ^1H -imaging study. *Eur J Appl Physiol*. 2000 May; 82(1-2):76-82. PMID: 10879446
- Shaffer M, Okereke E, Esterhai J, Elliott M, Walter GA, Yim S, Vandenborne K. The effects of immobilization on plantar flexion strength, endurance, and functional ability following an ankle fracture. *Physical Therap*. 2000 Aug; 80(8):769-80. PMID: 10911415

Gregory CM, **Vandenborne K**, Dudley GA. Metabolic enzymes and phenotypic expression among human locomotor muscles. *Muscle Nerve*. 2001 Mar; 24(3):387-93. PMID: 11353424

Al-Farra ET, **Vandenborne K**, Swift A, Ghafari J. Magnetic resonance spectroscopy of the masseter muscle in different facial morphological patterns. *Am J Orthod Dentofacial Orthop*. 2001; 120(4):427-34. PMID: 11606968

Russ DW, Elliott MA, **Vandenborne K**, Walter GA, Binder-Macleod SA. Metabolic costs of isometric force generation and maintenance of human skeletal muscle. *Am J Physiol Endocrinol Metab*. 2002 Feb; 282(2):E448-57. PMID: 11788378

Russ DW, **Vandenborne K**, Walter GA, Elliot M, Binder-Macleod SA. Effects of muscle activation on fatigue and metabolism in human skeletal muscle. *J Appl Physiol*. 2002 May; 92(5):1978-86. PMID: 11960948

Russ DW, **Vandenborne K**, Binder-Macleod SA. Factors in fatigue during intermittent electrical stimulation of human skeletal muscle. *J Appl Physiol* 2002 Aug; 93(2):469-78. PMID: 12133852

Gregory CM**, **Vandenborne K**, Huang HFS, Ottenweller JE, Dudley GA. Effects of testosterone replacement therapy on skeletal muscle after spinal cord injury. *Spinal Cord*. 2003 Jan; 41(1):23-8. PMID: 12494317

Rosenbaum M, **Vandenborne K**, Goldsmith R, Simoneau JA, Heymsfield S, Joannis DR, Hirsch J, Murphy E, Matthews D, Segal KR, Leibel RL. Effects of experimental weight perturbation on skeletal muscle work efficiency in human subjects. *Am J Physiol Regul Integr Comp Physiol*. 2003 Jul; 285(1):R183-92. Epub 2003 Feb 27. PMID: 12609816

Gregory CM**, **Vandenborne K**, Castro MJ, Dudley GA. Human and rat skeletal adaptations to spinal cord injury. *Can J Appl Physiol*. 2003; 28(3):491-500. PMID: 12955874

Stevens JE**, Walter GA, Okereke E, Scarborough MT, Esterhai JL, George SZ, Kelley MJ, Tillman SM, Gibbs JD, Elliott MA, Frimel TN*, Gibbs CP, **Vandenborne K**. Muscle adaptations with immobilization and rehabilitation after ankle fracture. *Med Sci Sports Exerc*. 2004 Oct; 36(10):1695-701. PMID: 15595289

White LJ, McCoy S, Castellano V, Gutierrez G, Stevens JE**, Walter GA, **Vandenborne K**. Resistance training improves strength and functional capacity in persons with multiple sclerosis. *Multiple Sclerosis*. 2004 Dec; 10(6):668-74. PMID: 15584492

Pathare N*, Walter GA, Stevens JA**, Yang Z, Okereke E, Gibbs JD, Esterhai JL, Scarborough MT, Gibbs CP, Sweeney HL, **Vandenborne K**. Changes in inorganic phosphate and force production in human skeletal muscle following cast immobilization. *J Appl Physiol*. 2005 Jan; 98(1):307-14. Epub 2004 Aug 27. PMID: 15333614

Mizner RL, Petterson SC, Stevens JE**, **Vandenborne K**, Snyder-Mackler L. Early quadriceps strength loss after total knee arthroplasty. The contributions of muscle atrophy and failure of voluntary muscle activation. *J Bone Joint Surg Am*. 2005 May; 87(5):1047-53. PMID: 15866968

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- Frimel TN*, Kapadia F, Gaidosh GS, Li Y, Walter GA, **Vandenborne K**. A model of muscle atrophy using cast immobilization in mice. *Muscle Nerve*. 2005; 32(5):672-4. PMID: 16025524
- Gregory CM**, Williams RH, **Vandenborne K**, Dudley GA. Metabolic and phenotypic characteristics of human skeletal muscle fibers as predictors of glycogen utilization during electrical stimulation. *Eur J Appl Physiol*. 2005 Oct; 95(4):276-82. Epub 2005 Oct 27. PMID: 16096841
- Ilfeld BM**, Wright TW, Enneking FK, Mace JA, Shuster JJ, Spadoni EH, Chmielewski TL**, **Vandenborne K**. Total shoulder arthroplasty as an outpatient procedure using ambulatory perineural local anesthetic infusion: a pilot feasibility study. *Anesth Analg*. 2005; 101(5):1319-22. PMID: 16243987
- Jayaraman A*, Gregory CM**, Bowden M, Stevens JE**, Shah P*, Behrman AL, **Vandenborne K**. Lower extremity skeletal muscle function in persons with incomplete spinal cord injury. *Spinal Cord*. 2006 Nov; 44(11):680-7. Epub 2005 Dec 13. PMID: 16344848
- Ilfeld BM**, Gearen PF, Enneking FK, Berry LF, Spadoni EH, George SZ, **Vandenborne K**. Total knee arthroplasty as an overnight-stay procedure using continuous femoral nerve blocks at home: a prospective feasibility study. *Anesth Analg*. 2006 Jan; 102(1):87-90. Erratum in: *Anesth Analg*. 2006 Mar; 102(3):875. PMID: 16368810
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- Ilfeld BM**, Wright TW, Enneking FK, **Vandenborne K**. Total elbow arthroplasty as an outpatient procedure using a continuous infraclavicular nerve block at home: a prospective case report. *Reg Anesth Pain Med*. 2006 Mar-Apr; 31(2):172-6. PMID: 16543104
- Liu M*, Bose P, Walter GA, Anderson DK, Thompson FJ, **Vandenborne K**. Changes in muscle T (2) relaxation properties following spinal cord injury and locomotor training. *Eur J of Appl Physiol*. 2006 Jun; 97(3):355-61. Epub 2006 Apr 25. PMID: 16770473
- Shah P*, Stevens JE, Gregory CM, Pathare NC*, Jayaraman A*, Bickel C, Bowden M, Behrman AL, Walter GA, Dudley GA, **Vandenborne K**. Lower extremity muscle cross-sectional area after incomplete spinal cord injury. *Arch Rehab Med*. 2006 Jun; 87(6):772-8. PMID: 16731211
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* Graduate student mentored by Dr. Vandenborne

** Postdoctoral or clinical fellow mentored by Dr. Vandenborne

- Pathare NC*, Stevens JE, Walter GA, Shah P*, Jayaraman A*, Tillman SM, Scarborough MT, Gibbs CP, **Vandenborne K**. Deficit in Human Muscle Strength with Cast Immobilization: Contribution of Inorganic Phosphate. *Eur. J. Appl. Physiol.* 2006 Sep; 98(1):71-8. Epub 2006 Jul 14. PMID: 16841201
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- Ilfeld BM, **Vandenborne K**, Duncan PW, Sessler DI, Enneking K, Shuster J, Theriaque DW, Chmielewski TL**, Spadoni EH, Wright TW. Ambulatory Continuous Interscalene Nerve Blocks Decrease the Time to Discharge-readiness following Total Shoulder Arthroplasty: A Randomized, Triple-masked, Placebo-controlled Stud. *Anesthesiology.* 2006 Nov; 105(5): 999-1007. PMID: 17065895
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- Gregory CM, Bowden MG, Jayaraman A*, Shah P*, Behrman A, Kautz SA, **Vandenborne K**. Resistance training and locomotor recovery after incomplete spinal cord injury: a case series. *Spinal Cord.* 2007 Jul; 45(7):522-30. Epub 2007 Jan 16. PMID: 17228358
- Borst SE, Conover CF, Carter CS, Gregory CM, Marzetti E, Leeuwenburgh C, **Vandenborne K**, Wronski TJ. Anabolic Effects of Testosterone Are Preserved during Inhibition of 5{alpha} - Reductase. *Am J Physiol Endocrinol Metab.* 2007 Aug; 293(2):E507-14. Epub 2007 May 8. PMID: 17488806
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- Pathare N, **Vandenborne K**, Liu M**, Stevens JE, Li Y, Frimel TN, Walter GA. Alterations in Inorganic Phosphate in Mouse Hindlimb Muscles During Limb Disuse. *NMR Biomed.* 2008 Feb; 21(2):101-110. PMID: 17516466
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- Shah P*, Gregory C, Stevens J, Pathare N, Jayaraman A*, Behrman A, Walter G, and **K Vandenborne**. Noninvasive assessment of Lower Extremity Muscle Composition after Incomplete Spinal Cord Injury. *Spinal Cord.* 2008 Aug; 46(8):565-70. Epub 2008 Mar 18. PMID: 18347608
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- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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)
- 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.
- 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.
- 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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

- 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.
- Ye F**, Baligand C**, Vohra RS*, Lim W*, Ruhella A, Keener J, Deol JK, Senesac E, Bose P, Walter GA, Thompson F, **Vandenborne K**. Responses to treadmill training following severe spinal cord injury in a rat model. 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. Public Health and Health Professions (PHHP) Research Day, University of Florida, Gainesville FL, April 18, 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. 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)
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.

- 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.
- 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).
- 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)
- 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)
- 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)
- 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)
- 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)
- 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)
- 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)
- 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)

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)

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 collagen VI myopathy. 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)

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)

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)

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.

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.

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.

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

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
- 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
- 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
- Lee-McMullen BA, Sato K, Baligand C**, Zeng H, Sharma P, **Vandenborne K**, Edison AS, Dolganiuc A, Walter GA, A Metabolomics Approach to Biomarker Discovery in Non-Alcoholic Steatohepatitis. *Proc. Intl. Soc. Magn. Reson. Med.* 21:3519 (2013). Salt Lake City, Utah, April 20-26, 2013
- 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).
- 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).
- 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.
- 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.
- 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
- Arora H*, Willcocks RJ**, Lott DJ, Senesac CR, Forbes SC, Bendixen RM**, Harrington AT, Walter GA, **Vandenborne K**. Performance on upper limb functional tests in control and DMD subjects. 13th Biennial Advances in Skeletal Muscle Biology in Health and Diseases Conference, Gainesville, Florida, March 5-7, 2014.
- Arpan I, Willcocks RJ**, Forbes SC, Lott DJ, Senesac C, Triplett WT, Daniels MJ, Byrne BJ, Finanger EL, Finkel RS, Russman BS, Rooney WD, Wang DJ, Tennekoon GI, Walter GA, Sweeney HL, **Vandenborne K**. Examination of the Effects of Corticosteroid Treatment on Skeletal Muscles of Boys

with DMD using Magnetic Resonance Imaging and Spectroscopy. 13th Biennial Advances in Skeletal Muscle Biology in Health and Diseases Conference, Gainesville, Florida, March 5-7, 2014.

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. Lower Extremity Muscle Involvement in Duchenne Muscular Dystrophy and Collagen VI myopathy. 13th Biennial Advances in Skeletal Muscle Biology in Health and Diseases Conference, Gainesville, Florida, March 5-7, 2014.

Chrzanowski SM*, Lee-McMullen BA*, Batra A*, Vohra R**, Deng Y, Jiang H, **Vandenborne K**, Walter GA. Magnetic Resonance Imaging and Spectroscopy as a Biomarker for Muscle Damage. 13th Biennial Advances in Skeletal Muscle Biology in Health and Diseases Conference, Gainesville, Florida, March 5-7, 2014.

Lee-McMullen B*, Clendinen C, Chrzanowski S*, Vohra R**, Triplett W, Forbes S, Edison AS, **Vandenborne K**, Walter GA. Metabolomic analysis for Duchenne Muscular Dystrophy in the Mdx Mouse Model. 13th Biennial Advances in Skeletal Muscle Biology in Health and Diseases Conference, Gainesville, Florida, March 5-7, 2014.

Lim W**, Baligand C**, Ye F, Vohra RS**, Ruhella A, Keener J, Bose P, Thompson F, Walter GA, **Vandenborne K**. The Changes of Muscle Morphology after Locomotor Training in a New Model of Spinal Cord Injury. 13th Biennial Advances in Skeletal Muscle Biology in Health and Diseases Conference, Gainesville, Florida, March 5-7, 2014.

Vohra R**, Kumar A, Forbes SC, Batra A*, Chrzanowski SM*, Lee BA*, **Vandenborne K**, Girgenrath M, Walter GA. Magnetic resonance imaging differences in animal models of Duchenne and Congenital muscular dystrophy. 13th Biennial Advances in Skeletal Muscle Biology in Health and Diseases Conference, Gainesville, Florida, March 5-7, 2014.

Willcocks RJ**, Forbes SC, Lott DJ, Senesac CR, Nicholson TR, Arora H*, Walter GA, **Vandenborne K**. Arm muscle involvement in Duchenne muscular dystrophy: A quantitative MRI and MRS study. 13th Biennial Advances in Skeletal Muscle Biology in Health and Diseases Conference, Gainesville, Florida, March 5-7, 2014.

Lee-McMullen BA*, Clendinen C, Chrzanowski SM*, Vohra R**, Baligand C**, Triplett W, Forbes S, Edison AS, **Vandenborne K**, Walter GA. Metabolomic analysis for Duchenne Muscular Dystrophy in the Mdx mouse. Translational Science 2014 Annual Meeting (Association for Clinical and Translational Science), Washington DC, April 9-11, 2014.

Chrzanowski SM*, Lee-McMullen BA*, Batra A*, Vohra R, Deng Y, Jiang H, **Vandenborne K**, Walter GA. Magnetic Resonance and Optical Imaging as a Biomarker for Muscle Damage. American Physician Scientists Association Annual Conference. Chicago, IL. April 26-28, 2014.

Forbes SC, Walter GA, Rooney WD, Wang DJ, Triplett W, Willcocks R**, Pollaro J, Byrne B, Finkel R, Russman B, Finanger E, Sweeney HL, Vandenborne K. T₂ mapping and Single Voxel ¹H-MRS Detect Skeletal Muscle Involvement in Young Boys with Duchenne Muscular Dystrophy. ISMRM, Med. 22, 4008, Milan, Italy, May 10-16, 2014.

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. ISMRM, Milan, Italy, May 10-16, 2014.

Rooney W, Forbes SC, Triplett W, Pollaro J, Wang DJ, de Vos S, Meyer J, Willcocks RJ**, Byrne B, Finkel R, Russman B, Finanger E, Daniels M, Sweeney L, Walter GA, **Vandenborne K**. Tracking Disease Progression in Duchenne Muscular Dystrophy: Longitudinal Changes in Quantitative MR Measures. ISMRM, Med. 22, 4008, Milan, Italy, May 10-16, 2014.

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 GA. Physiological changes in lower extremity skeletal muscle based on MR and Strength measures in DMD and COL VI Myopathy. New Directions in Biology and Disease of Skeletal Muscle, Chicago, IL, June 29 - July 2, 2014.

Chrzanowski SM*, Baligand C**, Willcocks R**, Lott DJ, Deol J, Schmalfuss I, Daniels M, Senesac C, Walter GA, **Vandenborne K**. Magnetic Resonance Imaging Detects Intramuscular Differences in Lower Legs of Boys with Duchenne Muscular Dystrophy. New Directions in Biology and Disease of Skeletal Muscle, Chicago, IL, June 29 - July 2, 2014.

Vohra R, Forbes SC, **Vandenborne K**, McNally E, Walter GA. Age dependent changes in cardiac and skeletal muscle T2 in gamma sarcoglycan deficient mice. New Directions in Biology and Disease of Skeletal Muscle, Chicago, IL, June 29 - July 2, 2014.

Willcocks RJ**, Forbes SC, Triplett BT, Lott DJ, Senesac CR, Nicholson TR, Arora H*, Walter GA, **Vandenborne K**. Magnetic resonance measures of muscle size and quality are altered in the upper extremity of 7-16 year old boys with DMD. New Directions in Biology and Disease of Skeletal Muscle, Chicago, IL, June 29 - July 2, 2014.

Forbes SC, Baligand C**, Vohra R**, Batra A*, **Vandenborne K**, Walter GA. Phosphocreatine recovery kinetics and microvascular function in mdx and nNOS-null mice assessed using MRI/MRS. Integrative Physiology of Exercise, Miami, FL, September 17-20, 2014.

Arora H*, Willcocks RJ**, Lott DJ, Senesac CR, Forbes SC, Bendixen RM**, Harrington AT, Walter GA, **Vandenborne K** (2014). Difference between upper limb strength and function in control and DMD subjects. Graduate Student Research Day. Gainesville, Florida. October 28, 2014.

Alabasi U*, Willcocks RJ**, Arpan I, Forbes SC, Triplett T, Rooney W, Lott DJ, Senesac CR, Finkel RS, Tennekoon GI, Harrington AT, Finanger EL, Russman BS, Walter GA, Sweeney HL, **Vandenborne K**. Association Between BMI and Intramuscular Fat Fraction in Boys with Duchenne Muscular Dystrophy. 2nd Annual Institute of Child Health Policy Research Day. Gainesville, Florida. November 4 2014.

Arora H*, Willcocks RJ**, Lott DJ, Senesac CR, Forbes SC, Bendixen RM**, Harrington AT, Walter GA, **Vandenborne K**. Boys with Duchenne muscular dystrophy have deficits in upper limb strength and function. 2nd Annual Institute of Child Health Policy Research Day. Gainesville, Florida. November 4, 2014.

Willcocks RJ, Forbes SC, Triplett WT, Rooney WD, Lott DJ, Harrington AT, Wang DJ, Tennekoon GI, Finanger E, Finkel R, Byrne BJ, Walter GA, Sweeney HL, **Vandenborne K**. MRI biomarkers are

responsive to disease progression and predictive of functional decline in Duchenne muscular dystrophy. 2015 NMPT, Gainesville, Florida, February 2015.

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Arora H*, Willcocks RJ, Lott DJ, Harrington AT, Senesac CR, Forbes SC, Tennekoon GI, Finanger EL, Finkel RS, Triplett WT, Byrne BJ, Walter GA, Sweeney HL, **Vandenborne K**. Disease progression in boys with Duchenne muscular dystrophy: 1 year longitudinal evaluation of functional performance. 10th Annual Neuromuscular Plasticity Symposium. Gainesville, Florida. March 13, 2015.

Barnard AM*, Willcocks RJ, Forbes SC, Rooney WD, Pham J, Hammers D, Triplett WT, Lott DJ, Senesac CR, Byrne BJ, Finanger EL, Russman BS, Wang DJ, Tennekoon GI, Finkel RS, Walter GA, Sweeney HL, **Vandenborne K**. Intramuscular fat is modified by genetic polymorphisms in Duchenne muscular dystrophy. 10th Annual Neuromuscular Plasticity Symposium. Gainesville, Florida. March 13, 2015.

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