UNIVERSITY OF FLORIDA
Department of Physical Therapy
COLLEGE OF PUBLIC HEALH AND HEALTH PROFESSIONS
Curriculum Vitae
August 2017

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

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: *Eugene Michels Researcher's Forum* 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 Scandinavica
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

Current students

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

Harneet Arora, Graduate Student, Rehabilitation Science, 2013-
Funding: Teaching Assistant, Research Assistant, Wellstone NIH training grant

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

<u>Member of Dissertation Committees:</u>

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 PlasticityT32 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 Fox01 via Histone Deacetylasis (Hdacs) during Cancer Cachexia", 2011-2015
Brandon Roberts, Doctoral Candidate, Rehabilitation Science, University of Florida, "The Role of Fox01 during Cancer Cachexia", 2012-2016
Dominque 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 ^{31}P-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 pathophysiologcal 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.", Higlighted 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 Musculosketal 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". PHHP 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

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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 31P-spectroscopy and 1H-imaging study. *Eur J Appl Physiol*. 2000 May; 82(1-2):76-82. PMID: 10879446

Underlined: Primary or senior author

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, Joanisse 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*, Walter GA, Gibbs JD, Gaidosh GS, **Vandenborne K**. Noninvasive monitoring of muscle damage during reloading following limb disuse. *Muscle Nerve*. 2005 Nov;32(5):605-12. PMID: 16003743

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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* Graduate student mentored by Dr. Vandenborne
** Postdoctoral or clinical fellow mentored by Dr. Vandenborne

Chen YW, Gregory CM, Scarborough MT, Shi R, Walter GA, **Vandenborne K**. Transcriptional Pathways Associated with Skeletal Muscle Disuse Atrophy in Humans. *Physiol Genomics.* 2007 Nov 14; 31(3):510-20

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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

Liu M**, Bose B, Walter GA, Thompson F, **Vandenborne K**. A longitudinal study of skeletal muscle following spinal cord injury and locomotor training. *Spinal Cord*. 2008 Jul; 46(7):488-93. Epub 2008 Feb 19. PMID: 18283294

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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