CURRICULUM VITAE GREGORY W. HOLTZMAN, PT, DPT, SCS July 2024

Contact Information:

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Present Position:

2020 – Present:	Professor in Physical Therapy and Orthopedic Surgery Washington
	University School of Medicine

2020 - Present: Division Director of Clinical Practice

Education:

<u>Degree</u>	<u>Institution</u>	Field/Major	Date
BA	Emory University Atlanta, GA	Psychology / Political Science	1991-1995
MSPT	Washington University St. Louis, MO	Physical Therapy	1999-2001
DPT	Washington University St. Louis, MO	Physical Therapy	2002-2007

Academic Positions / Employment:

Position	Institution/Facility	<u>Dates</u>
Physical Therapist	The Rehabilitation Institute of St. Louis St. Louis, MO	2002-2004

Instructor	Washington University School of Medicine Program in Physical Therapy St. Louis, MO	2003-2007
Assistant Professor	Washington University School of Medicine Program in Physical Therapy St. Louis, MO	2007-2013
Associate Professor	Washington University School of Medicine Program in Physical Therapy St. Louis, MO	2013-Present
Professor	Washington University School of Medicine Program in Physical Therapy St. Louis, MO	2020-Present

Clinical Title and Responsibilities:

Program in Physical Therapy

Washington University Physical Therapy Clinics:	
Clinician	2004-Present
Director of the Running Clinic	2011-Present
Associate Director of the Clinical Practice	2013-2020
Division Director of the Clinical Practice	2020-Present

Responsibilities: Manage an independent caseload of patients that present with a variety of orthopedic conditions. Specialize in the evaluation and treatment of movement faults and disorders that contribute to pain. Treat patients with post-operative musculoskeletal pain and limitation. Also evaluate and treat the injured runner (both competitive and recreational) using video technology. Management of the day-to-day operations of the Washington University Program in Physical Therapy Clinical Practice. Provide direct supervision to Clinic Managers at location of practice (@4240, 4444, O'Fallon, and Danforth). Specifically engage in marketing activities for the Practice as a whole and provide supervision to the providers on the Danforth campus.

Teaching Title and Responsibilities:

Washington University Program in Physical Therapy Professional Clinical Doctorate (DPT) Curriculum (WUSM)

Movement and Precision Health M4A/M4B (703A.01/703B.01) PCC/DMMP Co-coordinator: 2021-Present Class Size: 97 Prevention, Diagnosis, and Management of Movement-Related Problems M5 (710.01) DMMP MSK Co-coordinator: 2022-Present

Diagnosis and Management of Musculoskeletal Conditions I (PT 614) Course Assistant: 2005-2021 Class Size: 45-89

Diagnosis and Management of Musculoskeletal Conditions II (PT 624) Unit Coordinator: Knee – 2009-2021 Class Size: 70-89

Diagnosis and Management of Musculoskeletal Conditions III (PT 635) Course Coordinator: 2011-2020 Class Size: 70-89

Essential Skills II (PT 627) Course Coordinator: 2016-2021 Course Assistant: 2003-2015 Class Size: 45-89

Neurology Medicine (PT 625) Course Coordinator (PT): 2003-2005 Class Size: 80-100 (Includes OT students)

Alternative Skills and Practice Environments (PT 652) Course Coordinator: 2004-2011 Class Size: 45-75

Professional Issues and Skill Development II (PT 615) Course Coordinator: 2007-2013 Class Size: 65-80

Clinical Education (PT 691-PT 694) Member of Clinical Education Team: 2007-2016 Class Size: 15-25 students per class were seen for advisement

Lecturer for selected courses for the Professional Clinical Doctorate Program

M7/M8	2024-Present
M5	2022-Present
M4A/B	2021-Present
Diagnosis and Management of Musculoskeletal Conditions II	2009-2021
Health, Fitness, and Prevention	2009-2023
Alternative Skills and Practice Environments	2011-2013
Case Integration III	2012-2023
Kinesiology II	2012-2021

Anatomy	2013-2021
Focus Study: Evaluation and Treatment of the Injured Runner	2013-2023
Lab Assistant for selected courses for the Professional Clinical Doctorat	e Program
Prevention, Diagnosis, and Management of Complex	
Movement-Related Problems (M6)	2023-Present
Diagnosis and Management of Musculoskeletal Conditions I	2001-2021
Diagnosis and Management of Musculoskeletal Conditions II	2003-2021
Diagnosis and Management of Musculoskeletal Conditions III	2004-2022
Case Integration I/III	2004-2023
Kinesiology I/II	2012-2021
Washington University School of Medicine	
Participation in courses for Washington University Medical Students / R	esidents
Ambulatory Care Rounds	2006
Physical Medicine and Rehabilitation Rounds	2010
Source Testing for the Knee	2016
Evaluation and Treatment of the Injured Runner	2017-2022
Evaluation and Treatment of the Injured Runner with Lab	2022
Washington University Program in Occupational Therapy	
Participation in course for Washington University OTD students	
"Introduction to Physical Agents"	2006-2019
Continuing Education	
Lab Assistant for continuing education courses:	2002-Present
Diagnosis and Treatment of Musculoskeletal Conditions	
Advanced Applications – Lower Quarter	
Advanced Applications – Upper Quarter	
Instructor for continuing education course:	2006-Present
Diagnosis and Treatment of Musculoskeletal Conditions:	
Introductory Course	
Advanced Application – Lower Quarter	
Advanced Application – Upper Quarter	
Clinical Education / Teaching	
Clinical Instructor	2002-2003
The Rehabilitation Institute of St. Louis	
Early Clinical Experience Preceptor	2017-2020
Medical Licensure and Certification:	
Physical Therapist	
Missouri Board of Registration for the Healing Arts	2002-Present
License Number – 2002004659	

American Physical Therapy Association Credentialed Clinical Instructor Advanced Credentialed Clinical Instructor Board Certified Sports Clinical Specialist	2006-Present 2009-Present 2015-Present
Honors and Awards:	
Summa Cum Laude	1995
Emory University	
Outstanding Missouri Physical Therapy Student (Nominee)	2001
Washington University Program in Physical Therapy	
Guebert-Lake Scholarship Recipient	2000
Washington University Program in Physical Therapy	
Kathleen Dixon Book Scholarship Recipient	2000
Washington University Program in Physical Therapy	
Helen Holzum Service Award	2024
APTA of Missouri	

Community Service Contributions:

Departmental and academic unit committees and activities Washington University Program in Physical Therapy **Program Innovation Council** 2003-2004 2009-2010 Faculty Search Committee 2005-2009 2012-2014 2021-2023 Committee on Academic Evaluation of Students (CAES) 2003-2010 Technology in the Classroom Committee 2011-2014 Committee on Academic and Professional Evaluation of Student 2011-Present (CAPES) Admissions Committee (Professional Curriculum) 2004-Present Chair - Ad Hoc Marketing Committee 2013-2014 Program in Physical Therapy Curriculum Refresh Committees Domains and Competencies Writing Team 2019-Present Architecture Team 2019-Present Technology and Innovation Committee 2019-Present Module 4 Build Team 2021-Present Module 5 Build Team 2022-Present DMMP Thread Team 2024-Present Competency Attainment Committee (CAC) 2021-Present

Professional Societies and Organizations

American Physical Therapy Association	1999-Present
Orthopedic Section Member	2003-Present
Sports Section Member	2014-Present
Missouri State Delegate	2008-2013
Chief Delegate	2014-2017
Missouri Physical Therapy Association	2003-Present
Eastern District Nominating Committee	2004-2007
Chairperson	2006-2007
Board of Directors - Director	2017-2023
Membership Chair	2023-Present
Media	
St. Louis Post Dispatch	
"Runners Adapt to Prevent Injuries"	2011
Runner's World	
"Flex Benefits"	2014
St. Louis Magazine	
"Don't Stop"	2010
"Run for (the Rest of) Your Life"	2015
"HipHipHooray"	2016

Invited Presentations:

"Introduction of Physical Therapy for the Allied Health Professional" Missouri Society of Radiologic Technologists – 4 th District St. Louis, MO	2002
"Ultrasound and Therapeutic Laser" St. Louis Hand Therapy Society St. Louis, MO	2007
"Physical Therapist Assessment of Hip Disorders" 7 th Annual Sports Medicine Update St. Louis, MO	2012
"A Movement System Approach to the Evaluation and Treatment of the Injured Runner" Eastern District Missouri Physical Therapy Association St. Louis, MO	2012

"The Injured Runner: Treatment Strategies for Recovery and Prevention" Midwest Distance Running: Coaching Summit St. Louis, MO	2013
"A Movement System Approach to the Evaluation and Treatment of the Injured Runner" Combined Sections Meeting Las Vegas, NC	2014
"A Movement System Approach to the Evaluation and Treatment of the Injured Runner" Illinois PTA Association Belleville, IL	2014
"A Movement System Approach to the Evaluation and Treatment of the Injured Runner" Montana Physical Therapy Association State Meeting Whitefish, MT	2015
"A Movement System Approach to the Evaluation and Treatment of the Injured Runner" Halifax, Canada	2015
"Lower Quarter Movement System Impairment Syndromes for the Injured Runner" Montreal, Canada	2017
"A Movement System Approach to the Evaluation and Treatment of the Injured Runner" Middlebury, CT	2018
"Clinical Application of Current Technology in Physical Therapy Practice" Virtual Platform	2020
"A Movement System Impairment Approach to the Foot/Ankle and And the Injured Runner" UCLA, Virtual Course with Lab	2022
"Building Authentic Bidirectional Academic-Clinical Partnerships: Is it even Possible? APTA Education and Learning Conference Milwaukee, WI	2022

Research:

MPTA Grant – "Development and Testing of a Sitting Posture 2008-2015
Monitoring and Alerting System"
Principal Investigator – Barbara J. Norton, PT, PhD
Grant Amount: \$5,000.00
Clinical Trial – "Spinal Control During Functional Activities to Improve 2013-2017
Low Back Pain Outcomes"
Principal Investigator – Linda VanDillen, PT, PhD
NIH Grant #: R01 HD047709
Total Costs: \$1,563,678
Responsibilities:
Development of treatment documentation
Treating therapist for motor control group

Bibliography:

Original, peer reviewed articles in referred journals:

- 1. Harris-Hayes M, Holtzman GW, Earley JA, Van Dillen, LR. Development and preliminary reliability testing of an assessment of patient independence in performing a treatment program: Standardized scenarios. *J Rehabil Med*, 42(3): 221-7, 2010.
- 2. Holtzman GW, Harris-Hayes M, Hoffman SL, Zou D, Edgeworth RA, Van Dillen LR. Clinical examination procedures to determine the effect of axial decompression on low back pain symptoms in people with chronic low back pain. *Journal of Orthopedic and Sports Physical Therapy.* 42(2): 105-113, 2012.
- 3. Van Dillen LR, Norton BJ, Sahrmann SA, Harris-Hayes M, **Holtzman G**, Earley J, Strube MJ. Effects of classification specific treatment versus non specific treatment on low back pain related functional disability in people with chronic low back pain over a one year period. *International Society for Electromyography and Kinesiology*, Brisbane, AU; July 18-21, 2012, p.88.
- 4. Van Dillen LR, Norton BJ, Sahrmann SA, Evanoff BA, Harris-Hayes M, Holtzman GW, Early J, Chou I, Strube, MJ. Efficacy of classification-specific treatment and adherence on outcomes in people with chronic low back pain. A one-year follow-up, prospective, randomized, controlled clinical trial. *Manual Therapy.* 24: 52-64, 2016.

Case Reports:

1. Holtzman GW, Harris-Hayes M. Treatment of patella alta with taping, exercise, mobilization, and functional activity modification: A Case Report. *Physiotherapy Theory and Practice*. 28(1): 71-83, 2012.

2. Creighton A, Holtzman G, Ziegler C, Prather H. Sacral pedical stress fracture in an adolescent competitive basketball and track and field athlete with prior femoral physeal injury: A case report. *PM&R*. 11(6): 657-660, 2019

Reviews, Chapters, and Editorials, including invited publications:

- 1. Holtzman GW, Harris-Hayes M. Staging System for Rehabilitation. In *Movement System Impairment Syndromes of the Extremities, Cervical, and Thoracic Spines,* (pp 35-50) St. Louis, 2011, Elsevier.
- 2. Harris-Hayes M, Cornbleet SL, Holtzman GW. Movement System Syndromes of the Knee. In *Movement System Impairment Syndromes of the Extremities, Cervical, and Thoracic Spines,* (pp 354-438) St. Louis, 2011, Elsevier.
- 3. Czuppon SL, Cornbleet SL, **Holtzman G.** Movement Systems Impairment Approach to Diagnosis and Treatment of Knee Pain. In *Physical Therapy Approaches to the Lower Quarter*. Academy of Orthopedic Physical Therapy, 2019.

Abstracts:

- 1. Norton BJ, Wong M, Holtzman GW. Asymmetry of postural alignment in the frontal plane associated with trunk lateral bending in standing and sitting. *Journal of Orthopedics and Sports Physical Therapy.* 2006; 36: A51-A52.
- 2. Holtzman GW, Wong M, Norton BJ. Postural alignment differences in 2 test positions: Erect standing and unsupported sitting. *Journal of Orthopedics and Sports Physical Therapy.* 2006; 36: A41-A42.
- 3. Klaesner JW, Holtzman GW, Norton BJ. Instrumented office chair for measuring posture during prolonged sitting. 2007; Biomedical Engineering Society (BMES) Annual Meeting.
- 4. Harris-Hayes M, **Holtzman GW**, Earley J, VanDillen LR. Intra- and inter-rater reliability of physical therapists to assess patient's independence in performing a treatment program: Simulated patient scenarios. 2008; APTA Combined Sections Meeting.
- 5. **Holtzman GW**, Harris-Hayes M. Conservative treatment for patella alta: A Case Study. 2008; APTA Combined Sections Meeting.
- 6. **Holtzman GW**, Harris-Hayes M, Van Dillen L. Clinical exam procedures for unloading the lumbar region: Effects in people with chronic low back pain. 2009; APTA Combined Sections Meeting.
- 7. Norton BJ, Vernon D, Holtzman GW, Klaesner J. Development of a sitting posture monitoring system. 2010; APTA Combined Sections Meeting.

8. Holtzman GW, Vernon D, Norton BJ. Differences in frontal plane back curvature related to side, test condition, and history of low back pain. 2010; APTA Combined Sections Meeting.