

**CURRICULUM VITAE**  
**Ryan P. Duncan, PT, DPT, MSCI**

**Date:** June 25, 2024

**Name:** Ryan Patrick Duncan

**Address, Telephone, and E-mail:**

Business: Washington University School of Medicine  
Program in Physical Therapy  
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**Present Position:** 2020-present: Associate Professor, Physical Therapy & Neurology

**Education:**

Undergraduate:

2007 - B.S., Maryville University in St. Louis, St. Louis, MO

Graduate:

2008 - M.P.T., Maryville University in St. Louis, St. Louis, MO

2012 - D.P.T., Washington University in St. Louis, St. Louis, MO

2019 – M.S., Washington University in St. Louis, St. Louis, MO

**Academic Positions / Employment:**

2008-2009: Physical Therapist  
Barnes Jewish Hospital  
St. Louis, MO

2009-2012: Research Physical Therapist  
Washington University in St. Louis, Program in Physical Therapy  
St. Louis, MO

2012-2015: Adjunct Faculty  
Maryville University in St. Louis  
St. Louis, MO

2013-2014: Instructor of Physical Therapy & Neurology  
Washington University in St. Louis, Program in Physical Therapy  
St. Louis, MO

2014-2020: Assistant Professor of Physical Therapy & Neurology  
Washington University in St. Louis, Program in Physical Therapy  
St. Louis, MO

2020-present: Associate Professor of Physical Therapy & Neurology  
Washington University in St. Louis, Program in Physical Therapy

St. Louis, MO

**Clinical Title and Responsibilities:**

2013-2018, Physical Therapist, Washington University Physical Therapy Clinics

**Teaching Title and Responsibilities:**

Associate Professor, Program in Physical Therapy, Department of Neurology

Professional Clinical Doctorate (DPT) Curriculum:

Evidence – Thread team member

Clinician / Scholar / Educator – Thread Co-Lead

Module 5 – Prevention, Diagnosis, and Management of Movement Problems – Team Member

Module 7 – Practice and Movement – Team Member

Module 8 – Practice, Health, and Equity – Module Lead

**University and Clinical Appointments and Committees:**

2013-2018, Physical Therapist, Washington University PT Clinics

**Licensure and Certification:**

2008-present: License No. 2008034888 (Missouri, Active)

**Honors and Awards:**

2008: Dan Hartwig Award for Academic Excellence, Leadership, and Humanitarianism (Maryville University in St. Louis)

2012: Lorraine F. Lake Award (Washington University, Program in Physical Therapy)

2013: World Parkinson Congress – Travel Grant recipient

2013: NIH Loan Repayment Program Recipient (NINDS)

2014: Chattanooga Research Award (American Physical Therapy Association)

2016: World Parkinson Congress – Travel Grant recipient

2016: NIH Loan Repayment Program Renewal Recipient (NINDS)

2017: NIH Loan Repayment Program Renewal Recipient (NINDS)

2017: Outstanding Citizenship Award (Washington University Clinical Research Training Center)

2020: Helen May Bradley Achievement Award (Maryville University in St. Louis)

**Editorial Responsibilities:**

2011-present: Reviewer for *Parkinson's Disease*

2013-present: Reviewer for *Journal of Rehabilitation Medicine*

2013-present: Reviewer for *Archives of Physical Medicine & Rehabilitation*

2013-present: Reviewer for *Journal of Parkinson's Disease*

2013-present: Reviewer for *Journal of Neurologic Physical Therapy*

2013-present: Reviewer for *Physical Therapy*

2013-present: Reviewer for *Parkinsonism & Related Disorders*

2013-present: Reviewer for *International Journal of Therapy & Rehabilitation*

2013-present: Reviewer for *Journal of Medical Internet Research – Research Protocols*

2014-present: Reviewer for *Neurodegenerative Disease Management*

2014-present: Reviewer for *American Journal of Physical Medicine & Rehabilitation*

2014-present: Reviewer for *Gait & Posture*

2014-present: Reviewer for *Complementary Therapies in Medicine*

2014-present: Reviewer for *BioMed Research International*  
2014: Grant Reviewer for Netherlands Organization of Scientific Research  
2014: Abstract Reviewer for *World Confederation of Physical Therapy International Congress*  
2015-present: Reviewer for *Movement Disorders Clinical Practice*  
2015-present: Reviewer for *Acta Neurologica Scandinavica*  
2015-present: Reviewer for *Experimental Brain Research*  
2015-present: Reviewer for *Acta Neurologica Belgica*  
2015: Abstract Reviewer for APTA Combined Sections Meeting – Neurology Section  
2015: Grant Reviewer for LSVT Global, Inc.  
2015-present: Reviewer for *PLoS One*  
2015-present: Reviewer for *Neurorehabilitation & Neural Repair*  
2016-present: Reviewer for *Physiotherapy*  
2016-present: Reviewer for *BMJ Open*  
2016-present: Reviewer for *Clinical Neurology and Neurosurgery*  
2016-present: Reviewer for *Clinical Rehabilitation*  
2016-present: Reviewer for *Disability and Rehabilitation*  
2016-present: Reviewer for *Archives of Gerontology and Geriatrics*  
2017-present: Reviewer for *Physiotherapy Theory and Practice*  
2017-present: Reviewer for *Systematic Reviews*  
2017-present: Editorial Board Member, *Journal of Neurologic Physical Therapy*  
2019-present: Reviewer for *Journal of Geriatric Oncology*  
2019-present: Reviewer for *Annals of Physical Medicine & Rehabilitation*  
2019-present: Reviewer for *Arthritis Care & Research*  
2019-present: Reviewer for *Canadian Journal on Aging*  
2020-present: Reviewer for *Physiotherapy Canada*  
2022-present: Reviewer for *Neuroscience Letters*

#### **National Panels, Committees, Boards:**

2015-2017: Member, Scientific Advisory Board, Davis Phinney Foundation  
2017-2018: Member, Honors and Awards Committee, American Physical Therapy Association  
2017: Member, Planning Committee, American Parkinson Disease Association – Greater St. Louis Chapter, Optimism Walk  
2020: Member, Planning Committee, American Parkinson Disease Association – Greater St. Louis Chapter, Midwest Parkinson’s Disease Congress  
2021: Reviewer, “Competencies for Exercise Professionals Working with People with Parkinson’s Disease”, Parkinson’s Disease Foundation.  
2021: Content Expert and Reviewer, “Physical Therapist Management of Parkinson Disease: A Clinical Practice Guideline”, Academy of Neurologic Physical Therapy.  
2021: NIH Study Section, Ad Hoc Member – Human-Animal Interaction (ZHD1 DSR-H (55) 2), Review Panel Member, April 2, 2021.  
2022: NIH Study Section, Ad Hoc Member – Human-Animal Interaction (ZHD1 DSR-H (55) 2), Review Panel Member, April 8, 2022.  
2022: Ad Hoc Grant Reviewer, France Parkinson’s Association, May 2022  
2015, 2016, 2022: Grant Reviewer for Parkinson’s UK  
2023: Grant Reviewer for European Research Council  
2023: NIH Study Section, Ad Hoc Member – NINDS Special Emphasis Panel (**ZNS1 SRB G(58)**), Review Panel Member, May 2023  
2024: NIH Study Section, Ad Hoc Member – NINDS Special Emphasis Panel (**ZNS1 SRB G(65)**), Review Panel Member, April 2024

## Community Service Contributions:

### Departmental, University, or Hospital System Committees and Activities:

2019: Consideration Team Lead, Student Return on Investment, Washington University, Program in Physical Therapy

### Professional Societies and Organizations:

2008-present: American Physical Therapy Association

2008-present: American Physical Therapy Association of Missouri

2013-2017: Chair, Eastern District

2014-2017: Delegate, Eastern District

2017-2023: Chief Delegate

2008-2010: American Physical Therapy Association, Acute Care Section

2010-present: American Physical Therapy Association, Research Section

2010-present: American Physical Therapy Association, Neurology Section

2012-2019: Combined Sections Meeting Programming Committee

2013-2017: Co-Chair, Combined Sections Meeting Programming Committee

2010-present: International Society for Posture and Gait Research

2014-present: International Parkinson's and Movement Disorders Society

2020-2022: American Physical Therapy Association, Education Section

2021-present: International Association for the Study of Pain

### Media Activities:

2013: "Parkinson's 'Freezers' Likely to Stumble", MedPage Today

2013: "Staying Active Reduces Falls in Older Adults", St. Louis Post-Dispatch

2013: "Physical Therapy and Exercise for Parkinson Disease", Greater St. Louis American Parkinson's Disease Association Newsletter

2014: "Passionate and precise, the Tango is also therapeutic", The Washington Post

2015: "Why You Should Get Physical Therapy for Parkinson's Disease", Guest Blog

Author, getPT1st.com

2015: "Physical Therapy for Parkinson Disease: How to Prep for your First Visit", Guest Blog Author, Michael J. Fox Foundation

2016: "Get to the Table or Be on the Menu – Importance of Professional Advocacy", Senior Rehab Project – Podcast, seniorrehabproject.com

2016: "Pulse Q&A with Ryan Duncan, PT, DPT", Guest Blog Author, American Physical Therapy Association

2017: "Falls in Parkinson Disease: Can They Be Reduced or Prevented?", Greater St. Louis American Parkinson's Disease Association Newsletter

2020: "4D Podcast: Getting Clinicians Involved in Research," Featured Guest, Degenerative Disease Special Interest Group, Academy of Neurologic Physical Therapy

2020: "Parkinson's Research Update," Featured Guest, iMove TelePT Facebook Live

2022: "10 Things Women with Parkinson's Disease Can Do to Get the Care They Need," Expert Contributor, EverydayHealth.com

2022: "Low Back Pain in Parkinson Disease," Author, Greater St. Louis Chapter of the American Parkinson's Disease Association Newsletter

2022: "Such a Pain in the...Back?," Guest Blog Author, World Parkinson Congress Blog, worldpdcongress.org, (<https://www.worldpdcongress.org/home/2022/3/8/such-a-pain-in-theback>)

2023: “College of Medicine Works to Establish Parkinson’s Cure Center”, University Press, Interviewee (<https://www.upressonline.com/2023/06/college-of-medicine-works-to-establish-parkinsons-cure-center/>)

2023: “Fear Avoidance Behaviors’ Impact on Movement and Participation with Merrill Landers and Ryan Duncan” – Podcast for the Degenerative Disease Special Interest Group of the Academy of Neurologic Physical Therapy

**Invited Professorships and Lectureships:**

“A Comparison of the Accuracy of Two Pulse Oximeter Technologies during Ambulation a Wheeled Walker: a Pilot Study”

Platform Presentation

APTA – Combined Sections Meeting, Las Vegas, NV

February 2008

“Parkinson Disease and Rehabilitation”

Lecture Series

Barnes Jewish Hospital Rehabilitation, St. Louis, MO

May 2010

“Community-based Dance for People with Parkinson Disease”

Platform Presentation

APTA – Combined Sections Meeting, New Orleans, LA

February 2011

“Four Square Step Test Performance in Parkinson Disease”

Platform Presentation

APTA – Combined Sections Meeting, Chicago, IL

February 2012

“An Evidence-Based Approach to Examination and Intervention for People with Parkinson’s Disease Across the Continuum of Disability”

Continuing Education Course

Missouri Physical Therapy Association, Fall Conference, Columbia, MO

October 2012

“Balance Differences between People with and without Freezing of Gait in Parkinson Disease”

Hot Topic Presentation

World Parkinson Congress, Montreal, Canada

October 2013

“Falls in Parkinson Disease: Causes, Prediction, and Prevention”

Educational Session

APTA – Combined Sections Meeting, Indianapolis, IN

February 2015

“An Evidence-Based Approach to Examination and Intervention for People with Parkinson’s Disease Across the Continuum of Disability”

Continuing Education Course

Memorial Hospital – Rehabilitation Special Interest Group, Belleville, IL

August 2015

“An Evidence-Based Approach to Examination and Intervention for People with Parkinson’s Disease Across the Continuum of Disability”

Pre-Conference Continuing Education Course

American Physical Therapy Association, Combined Sections Meeting, Anaheim, CA

February 2016

“Investing in Your Profession: Advocacy in Physical Therapy”

National Advocacy Dinner, Saint Louis, MO

April 2016

“Physical Therapy and Deep Brain Stimulation in Parkinson Disease”

Comprehensive Opportunities in Rehabilitation Research Training – Annual Retreat, Pittsburgh, PA

August 2016

“An Evidence-Based Approach to Examination and Intervention for People with Parkinson’s Disease Across the Continuum of Disability”

Continuing Education Course

Academy of Neurologic Physical Therapy, Regional Course, Chicago, IL

September 2016

“APTA Legislative Priorities: Role of Professional Advocacy”

Professional Issues Course (PT 8130)

University of Missouri, Columbia, MO

November 2016, 2017, 2018, 2019, 2020, 2021, 2022

“Evidence-Based Rehabilitation in Parkinson Disease”

Anderson Hospital – Department of Rehabilitation

January 2017

“Low Back Pain in Parkinson Disease”

Comprehensive Opportunities in Rehabilitation Research Training – Annual Retreat, Newark, DE

August 2017

“Physical Therapy to Reduce Falls in Parkinson Disease”

Midwest Parkinson’s Congress

American Parkinson Disease Association

October 2017

“Physical Therapist Assessment in Parkinson Disease”

BJC Department of Rehabilitation

Annual Continuing Education Course

November 2017

“Exercise in Parkinson Disease”

Davis Phinney Foundation

Victory Summit – Oklahoma City, OK

December 2017

“Applying the Movement System Diagnoses to Neurodegenerative Disease”

Educational Session

APTA – Combined Sections Meeting, New Orleans, LA

February 2018

“Low Back Pain in Parkinson Disease: Impact on Disease Severity, Physical Activity, and Quality of Life”

Platform Presentation

APTA – Combined Sections Meeting, New Orleans, LA

February 2018

“Exercise in Parkinson Disease”

Davis Phinney Foundation

Victory Summit – Los Angeles, CA

August 2018

“Falls and Fall Risk in Older Adults”

WUPT Lecture Series at OASIS – St. Louis, MO

July 2018

“Low Back Pain in Parkinson Disease”

Comprehensive Opportunities in Rehabilitation Research Training – Annual Retreat, Newark, DE

August 2018

“Exercise in Parkinson Disease”

Davis Phinney Foundation

Victory Summit – Albuquerque, NM

October 2018

“Update on Physical Therapy Examination and Treatment in Parkinson Disease”

Missouri Physical Therapy Association – Eastern District – St. Louis, MO

January 2019

“Low Back Pain in Parkinson’s Disease: Is It Related to Age?”

Comprehensive Opportunities in Rehabilitation Research Training – Annual Retreat, Denver, CO

August 2019

“National and Local Legislative Issues in Physical Therapy”

Midwest Student Conclave – Kansas Physical Therapy Association – Kansas City, MO

September 2019

“Evidence-Based Examination and Treatment of People with Parkinson Disease”

Memorial Hospital – Rehabilitation Special Interest Group – Belleville, IL

October 2019

“Exercise in Parkinson Disease”

Greater St. Louis Chapter of the American Parkinson’s Disease Association – Quincy, IL

November 2019

“An Evidence-Based Approach to Examination and Intervention for People with Parkinson’s Disease Across the Continuum of Disability”  
Continuing Education Course  
Academy of Neurologic Physical Therapy, Regional Course, St. Louis, MO  
December 2019

“Pain in Parkinson Disease”  
Movement Disorders Section Journal Club  
Washington University in St. Louis, St. Louis, MO  
July 2020

“Pain in Parkinson’s Disease”  
Department of Anesthesiology, Pain Management Section  
Washington University in St. Louis, St. Louis, MO  
March 2021

“Pain in Parkinson Disease: It’s Complicated”  
Parkinson’s Pointe Support Group, Aurora, CO (virtual)  
May 2021

“Musculoskeletal Conditions in Neurologic Disease: Pain in Parkinson’s Disease”  
Washington University Program in Physical Therapy – Alumni Movement System Update  
June 2021

“Unraveling the Complexities of Low Back Pain in Parkinson Disease”  
Massachusetts General Hospital – Rehabilitation Sciences Invited Lectureship  
August 2021

“Musculoskeletal Pain in Parkinson Disease”  
PhysicalTherapy.com Continuing Education event (virtual)  
September 2021

“Geriatric Low Back Pain: Current and Future Considerations”  
American Physical Therapy Association – Combined Sections Meeting (San Antonio, TX)  
February 2022

“Musculoskeletal Pain in Parkinson’s Disease: Why Should We Care?”  
University of Nevada Las Vegas – Department of Physical Therapy  
March 2022

“Making Sense of Pain in People with Neurologic Conditions”  
American Physical Therapy Association of Missouri – Spring Conference (Kansas City, MO)  
April 2022

“An Evidence-Based Approach to Assessment and Treatment for People with Parkinson’s Disease Across the Continuum of Disability”  
Continuing Education Course  
Parkinsonlife Corporation, Tampa Bay, FL



November 2022

“Mind Over Movement: Fear Avoidance Behaviors Impacting Movement and Participation in People with Neurologic Conditions”

American Physical Therapy Association – Combined Sections Meeting (San Diego, CA)

February 2023

“Finding Your Research Path”

American Physical Therapy Association – Combined Sections Meeting (San Diego, CA)

February 2023

“Relationship Between Low Back Pain-Related Disability, Motor Capacity, and Executive Function in Parkinson Disease” (Platform Presentation)

American Physical Therapy Association – Combined Sections Meeting (San Diego, CA)

February 2023

“Proactivity Across the Parkinson’s Continuum – Pre-Habilitation: Preventing Complications”

World Parkinson Congress (Barcelona, Spain)

July 2023

“Keeping Current: Update on Evidence-Based Assessment and Treatment in Parkinson Disease”

Academy of Neurologic Physical Therapy – Annual Conference (Minneapolis, MN)

September 2023

“Low Back Pain in Parkinson Disease”

American Parkinson’s Disease Association - Midwest Parkinson Congress (St. Louis, MO)

April 2024

### **Consulting Relationships and Board Memberships**

None

### **Research:**

#### **Previous:**

Research Physical Therapist

“Mechanisms of Deep Brain Stimulation”

PI: Joel Perlmutter

Source: NIH/NINDS (R01 NS041509)

\$3,385,654; 2001-2016

Research Physical Therapist

“Oculomotor Control and Gait in Parkinson Disease”

PI: Earhart

Source: NIH/NCMRR (R01 HD056015)

\$475,200; 2009-2012

Research Physical Therapist

“Unveiling the Natural History of Quality of Life and Mobility Decline in Persons with Parkinson’s Disease: A Prospective Cohort Study”

PI: Earhart

Source: Davis Phinney Foundation  
\$96,000; 2009-2012

Research Physical Therapist  
“PD4PD: Partnered Dance for Parkinson Disease”  
PI: Earhart  
Source: Parkinson’s Disease Foundation  
\$150,000; 2009-2011

Research Physical Therapist  
“Freezing of Gait in Parkinson Disease: An Interdisciplinary Approach”  
PI: Gammon Earhart  
Source: University Research Strategic Alliance  
\$25,000; 2011-2012

Co-Principal Investigator  
“Telemedicine & Tango for Parkinson’s Disease: In-Person vs. Virtual Dance Class”  
PIs: Ryan Duncan, Marie McNeely, Gammon Earhart  
Source: Washington University Department of Neurology / Health South Corporation  
\$30,000; 2015-2016

Research Physical Therapist  
“Exercise and Parkinson’s: Comparing Interventions and Exploring Neural Mechanisms”  
PI: Gammon Earhart  
Source: NIH/NINDS (R01 NS077959)  
\$1,900,000; 2012-2017

Scholar  
“Physical Therapy and Deep Brain Stimulation in Parkinson Disease”  
Primary Mentor: Joel Perlmutter, MD; Secondary Mentor: Linda Van Dillen, PT, PhD  
Source: NIH/NICHD/NCMRR/NINDS (K12 HD055931 – PI: Mueller)  
\$75,000; 2016-2019

Scholar  
“Physical Therapy and Deep Brain Stimulation in Parkinson Disease”  
Primary Mentor: Joel Perlmutter, MD; Faculty Mentor: Jane Garbutt, MD  
Source: Mentor Training Program in Clinical Investigation (MTPCI) – ICTS  
Washington University School of Medicine

Co-Investigator  
Principal Investigator: Elizabeth Salerno  
“Characterizing Mental and Cognitive Health and Physical Activity in the Perioperative Breast Cancer Setting”  
Source: Washington University Center for Perioperative Mental Health  
\$40,000; 2021-2022

Research Physical Therapist

Principal Investigators: Gammon Earhart, Terry Ellis  
“Walking and mHealth to Increase Participation in Parkinson Disease (WHIP-PD)”  
Source: NIH/NICHHD R01 HD092444  
\$669,771; 2018-2023

Principal Investigator  
“Low Back Pain in Parkinson Disease”  
Primary Mentor: Joel Perlmutter, MD; Secondary Mentor: Linda Van Dillen, PT, PhD  
Source: NIH/NICHHD K23 HD100569  
\$104,698; 2020-2024

**Current:**

Co-Investigator  
Principal Investigator: Elizabeth Salerno  
“Prehabilitation to Revolutionize Oncology: Telehealth Exercise for Cognitive Triumphs (PROTECT)”  
Source: Siteman Investigator Program – Washington University and Barnes Jewish Hospital  
\$199,992; Jan 2023-Jan 2025

Research Physical Therapist  
Principal Investigator: Gammon Earhart  
“Sing For Your Saunter: Using Self-Generated Cues to Enhance Gait in Parkinson Disease”  
Source: National Institutes of Health (R33)  
\$542,164; 2020-2025

**Pending:**

Consultant  
Principal Investigator: Jason Longhurst  
“Relation of Pain and Fear of Falling to Gait Adaptability in Parkinson Disease”  
Source: National Institutes of Health (R03)

**Trainee/Mentee/Sponsorship Record:**

**Graduate Students:**

2011-2013: Alysha Rasch, PT, DPT, Rachel Merideth, PT, DPT, Megan McCormick, PT, DPT, Sarah McDaniel, PT, DPT, Sara Townsend, PT, DPT – advisor for Maryville University DPT student research project

2012-2013: Katie Webb, PT, DPT – Washington University Program in Physical Therapy, advisor for case report and literature synthesis

2013-2015: Samantha Poteet, SPT, Kristin Scherer, SPT, Patrick Jacobs, SPT, Kyle Reynolds, SPT, Whitley Hudson, SPT – Maryville University DPT student research project

2015: Cameron Jadali, PT, DPT – Clinical Experience IV – Washington University Program in Physical Therapy

2016: Sarah Moore, PT, DPT – Washington University Program in Physical Therapy, advisor for case report and literature synthesis

2017: John Sosanya, PT, DPT – Washington University Program in Physical Therapy, advisor for case report and literature synthesis

2018: Ning Ding, PT, DPT – Washington University Program in Physical Therapy, advisor for case report and literature synthesis

2019: Kristen Ivy, SPT – Washington University Program in Physical Therapy, advisor for case report and literature synthesis

2020: Madeline Scrivner, SPT – Washington University Program in Physical Therapy, advisor for case report and literature synthesis

2020: Kallie Hart, SPT – Washington University Program in Physical Therapy, advisor for case report and literature synthesis

2021: Ian Huffman, SPT – Washington University Program in Physical Therapy, advisor for literature synthesis

2021: Jamie Reuter, SPT – Washington University Program in Physical Therapy, advisor for literature synthesis

2022: Matthew Tassler, SPT – Washington University Program in Physical Therapy, advisor for literature synthesis

2022: Nidhi Talpade, SPT – Washington University Program in Physical Therapy, advisor for literature synthesis

2023: Payton Huffman, SPT – Washington University Program in Physical Therapy, advisor for literature synthesis

2023: Emily Dyson, SPT – Washington University Program in Physical Therapy, advisor for literature synthesis

2024: Kayla Thuet, SPT – Washington University Program in Physical Therapy, advisor for Knowledge to Action final project

2024: Alexa Tucker, SPT; Samantha Thienes, SPT; Payton Price, SPT – Washington University Program in Physical Therapy, advisor for House of Delegates final project

### **Bibliography:**

#### **Original, peer-reviewed articles in refereed journals:**

1. **Duncan RP**, Earhart GM. Measuring participation in individuals with Parkinson disease: relationships with disease severity, quality of life, and mobility. *Disabil Rehabil.* 2011;33(15-16):1440-1446. PMID: 20191047.
2. **Duncan RP**, Leddy AL, Earhart GM. Management of balance and gait in older individuals with Parkinson's disease. *Aging Health.* 2011;7(2):205-218.

3. **Duncan RP**, Leddy AL, Earhart GM. Five times sit to stand test performance in Parkinson disease. *Arch Phys Med Rehabil*. 2011;92(9):1431-1436. PMID: 21878213.
4. **Duncan RP**, Earhart GM. Randomized controlled trial of community-based dancing to modify disease progression in Parkinson disease. *Neurorehabil Neural Repair*. 2012;26(2):132-143. PMID: 21959675.
5. **Duncan RP**, Leddy AL, Cavanaugh JT, Dibble LE, Ellis TD, Ford MP, Foreman KB, Earhart GM. Accuracy of fall prediction in Parkinson disease: six-month and 12-month prospective analyses. *Parkinsons Dis*. 2012;1-7. PMID: 22191069.
6. McNeely ME, **Duncan RP**, Earhart GM. Medication improves balance and complex gait performance in Parkinson disease. *Gait & Posture*. 2012;36(1):144-148. PMID: 22418585.
7. Pickett KA, **Duncan RP**, Permutt A, Marshall B, Hershey T, Earhart GM. Balance impairment present in young individuals with Wolfram syndrome. *Gait & Posture*. 2012;36(3):619-624. PMID: 22771154.
8. **Duncan RP**, Earhart GM. Should one measure balance or gait to best predict falls among people with Parkinson disease? *Parkinsons Dis*. 2012; 923493. PMID: 23213622.
9. Pickett KA, **Duncan RP**, Hoekel J, Marshall B, Hershey T, Earhart GM. Early presentation of gait impairment in Wolfram Syndrome. *Orphanet J Rare Dis*. 2012;7:92. PMID: 23217193.
10. Foster ER, Golden L, **Duncan RP**, Earhart GM. Community-based Argentine tango dance program is associated with increased activity participation among individuals with Parkinson's disease. *Arch Phys Med Rehabil*. 2013;94(2):240-9. PMID: 22902795.
11. **Duncan RP**, Earhart GM. Four square step test performance in people with Parkinson disease. *J Neurol Phys Ther*. 2013;37(1):2-8. PMID: 23364168.
12. **Duncan RP**, Leddy AL, Cavanaugh JT, Dibble LE, Ellis TD, Ford MP, Foreman KB, Earhart, GM. Comparative utility of the BESTest, Mini-BESTest, and Brief-BESTest for predicting falls in individuals with Parkinson disease: a cohort study. Comparison with the BESTest and Mini-BESTest. *Phys Ther*. 2013;93(4):542-50. PMID: 23174567.
13. Nemanich ST, **Duncan RP**, Cavanaugh J, Dibble L, Ellis T, Ford M, Foreman KB, Earhart GM. Predictors of walking speeds and differences between preferred and fast as possible walking speeds in people with Parkinson disease. *Parkinsons Dis*. 2013; 141720. PMID: 23841020.
14. Peterson DS, Pickett KA, **Duncan RP**, Perlmutter JS, Earhart GM. Brain activity during complex gait tasks in Parkinson disease. *Clin Neurophysiol*. 2013; 125(5):995-1005. PMID: 24210997.
15. Peterson DS, Pickett KA, **Duncan R**, Perlmutter JS, Earhart GM. Gait-related brain activity in people with Parkinson disease with freezing of gait. *PLoS One*. 2014;9(3):e90634. PMID: 24595265.

16. **Duncan RP**, Earhart GM. Are the effects of community-based dance on disease severity, balance, and functional mobility reduced with time in Parkinson disease? A two-year prospective pilot study. *J Alt Comp Med*. 2014;20(10):757-63. PMID: 25192393.
17. **Duncan RP**, Leddy AL, Cavanaugh JT, Dibble LE, Ellis TD, Ford MP, Foreman KB, Earhart, GM. Detecting and predicting balance decline in Parkinson disease: a prospective cohort study. *J Parkinsons Dis*. 2015;5(1):131-9. PMID: 25514984.
18. Earhart GM, **Duncan RP**, Huang JL, Perlmutter JS, Pickett KA. Comparing interventions and exploring neural mechanisms of exercise in Parkinson disease: a study protocol for a randomized controlled trial. *BMC Neurology*. 2015;15(1):9. PMID: 25652002.
19. McNeely ME, **Duncan RP**, Earhart GM. A comparison of dance interventions in people with Parkinson disease and older adults. *Maturitas*. 2015;81(1):10-6. PMID: 25771040.
20. **Duncan RP**, Cavanaugh JT, Earhart GM, Ellis TD, Ford MP, Foreman KB, Leddy AL, Paul SS, Canning CG, Thackeray A, Dibble LE. External validation of a simple clinical tool used to predict falls in people with Parkinson disease. *Parkinsonism Relat Disord*. 2015;21(8):960-3. PMID: 26003412.
21. **Duncan RP**, Leddy AL, Cavanaugh JT, Dibble LE, Ellis TD, Ford MP, Foreman KB, Earhart, GM. Balance differences in people with Parkinson disease with and without freezing of gait. *Gait Posture*. 2015;42(3):306-9. PMID: 26141905.
22. McNeely ME, **Duncan RP**, Earhart GM. Impact of Dance on Mood, Cognition, Participation, and Quality of Life in Parkinson Disease and Older Adults. *Maturitas*. 2015;82(4):336-41. PMID: 26318265.
23. McNeely ME, Mai MM, **Duncan RP**, Earhart GM. Differential effects of tango versus Dance for PD in Parkinson disease. *Frontiers Aging Neurosci*. 2015;7:239. PMID: 26733865.
24. Paul SS, Thackeray A, **Duncan RP**, Cavanaugh JT, Ellis TD, Earhart GM, Ford MP, Foreman KB, Dibble LE. Two-year trajectory of fall risk in people with Parkinson's disease: a latent class analysis. *Archives of Physical Medicine & Rehabilitation*. 2016;97(3):372-9. PMID: 26606871.
25. Christofolletti G, McNeely ME, **Duncan RP**, Campbell MC, Earhart GM. Factors impacting mobility in Parkinson's disease: evaluating the contribution of age, disease severity, and executive function. *Human Mov Sci*. 2016; 49:308-314. PMID: 27551818.
26. Seidler KJ, **Duncan RP**, McNeely ME, Hackney ME, Earhart GM. Feasibility and preliminary efficacy of a telerehabilitation approach to group adapted tango instruction for people with Parkinson disease. *Journal of Telemedicine and Telecare*. 2017;23(8):740-6. PMID: 27624469.
27. **Duncan RP**, Combs-Miller S, Leddy A, Cavanaugh J, Dibble L, Ellis T, Ford M, Foreman KB, Earhart GM. Do the 10 Meter and 6 Minute Walk Tests measure unique aspects of gait performance in Parkinson disease? *Gait Posture*. 2017; 52:178-182. PMID: 27915221.

28. Sutter EN, Seidler KJ, **Duncan RP**, Earhart GM, McNeely ME. Relationships Between Gait and Postural Responses in Parkinson Disease. *Journal of Rehabilitation Medicine*. 2017; 49(6):505-511. PMID: 28553677.
29. **Duncan RP**, McNeely ME, Earhart GM. Maximum step length test performance in people with Parkinson disease. *Journal of Neurologic Physical Therapy*. 2017; 41(4):215-221. PMID: 28922312.
30. Prateek GV, Skog I, McNeely ME, **Duncan RP**, Earhart GM, Nehorai A. Modeling, detecting, and tracking freezing of gait in Parkinson disease using inertial sensors. *IEEE Trans Biomed Eng*. 2018; 65(10):2152-2161. PMID: 29989948.
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43. Salerno EA, Saint-Maurice PF, Wan F, Peterson LL, Park Y, Cao Y, **Duncan RP**, Troiano RP, Matthews CE. Prospective Associations Between Accelerometry-Derived Physical Activity and Sedentary Behaviors and Mortality Among Cancer Survivors. *Journal of the National Cancer Institute – Cancer Spectrum*. 2023; 7(2):pkad007.
44. **Duncan RP** and Earhart GM. Remote Delivery of Allied Health Therapies in Parkinson's Disease. *Journal of Parkinson's Disease*. 2023. Accepted.
45. Tueth LE, **Duncan RP**, Crouner BE, Earhart GM. Comparing Balance Using the BESTest in Alzheimer, Huntington, and Parkinson Disease. *Neurodegenerative Disease Management*. 2024. Accepted.
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47. Paul SS, Porciuncula F, Cavanaugh JT, Rawson KS, Nordahl TJ, Baker TC, **Duncan RP**, Earhart GM, Ellis TD. Direct and Mediated Effects of Physical Activity and Community Access among People with Mild to Moderate Parkinson's Disease: a Causal Mediation Analysis. *In review*.

**Abstracts – selected, high impact meeting abstracts:**

1. **Duncan RP**, Earhart GM. Relationships Between Participation, Quality of Life and Mobility in Individuals with Parkinson Disease. World Parkinson Congress, Glasgow, Scotland, UK. *Mov Disord*. 2010;25(Suppl 3):S705.
2. Earhart GM, Rotello JMM, **Duncan RP**. Short-Term Effects of a Community-Based Tango Program on Motor and Non-Motor Symptoms, Activities of Daily Living, and Motor Complications in PD. World Parkinson Congress, Glasgow, Scotland, UK. *Mov Disord*. 2010;25(Suppl 3):S697-S698.
3. **Duncan RP**, Rotello JMM, Earhart GM. Community-based Dance for People with Parkinson Disease. APTA – Combined Sections Meeting, New Orleans, LA. 2011.



4. **Duncan RP**, Earhart GM. Four Square Step Test Performance In Individuals with Parkinson Disease. APTA – Combined Sections Meeting, Chicago, IL. 2012.
5. Earhart GM, **Duncan RP**, Leddy AL, Cavanaugh JT, Ellis T, Ford MP, Foreman KB, Dibble LE. Prospective Identification of Fallers with Parkinson Disease Using the BESTest and MiniBESTest. APTA – Combined Sections Meeting, Chicago, IL. 2012.
6. Earhart GM, **Duncan RP**. Should One Measure Balance or Gait to Best Predict Falls Among People with Parkinson Disease? International Society for Posture and Gait Research – Trondheim, Norway. 2012.
7. **Duncan RP**, Leddy A, Cavanaugh J, Dibble L, Ellis T, Ford M, Foreman KB, Earhart GM. Predicting Falls in Parkinson Disease: Is the Brief-BESTest as Good as the Mini-BESTest? APTA Combined Sections Meeting, San Diego, CA. 2013.
8. **Duncan RP**, Leddy A, Cavanaugh J, Dibble L, Ellis T, Ford M, Foreman KB, Earhart GM. Prospective Measurement of Balance Decline in People with Parkinson Disease. Movement Disorder Society International Congress – Sydney, Australia. 2013.
9. **Duncan RP**, Leddy A, Cavanaugh J, Dibble L, Ellis T, Ford M, Foreman KB, Earhart GM. Predictors of Change in Balance Over 6 and 12 Months in Parkinson Disease. Movement Disorder Society International Congress – Sydney, Australia. 2013.
10. **Duncan RP**, Leddy A, Cavanaugh J, Dibble L, Ellis T, Ford M, Foreman KB, Earhart GM. Balance Differences Between People with and without Freezing of Gait in Parkinson Disease. World Parkinson Congress – Montreal, Canada. 2013.
11. **Duncan RP**, Earhart GM, Pickett KA, Weiss R, Campbell MC. Do Measures of Balance, Motor Severity, or Executive Function Accurately Identify Fall History in Parkinson Disease? APTA Combined Sections Meeting. Indianapolis, IN. 2015.
12. Paul SS, **Duncan RP**, Cavanaugh JT, Earhart GM, Ellis TD, Ford MP, Foreman KB, Leddy AL, Canning CG, Thackeray A, Dibble LE. External Validation of a Simple Clinical Tool Used to Predict Falls in People with Parkinson Disease. International Congress of Parkinson’s Disease and Movement Disorders – San Diego, CA. 2015.
13. **Duncan RP**, McNeely ME, Earhart GM. Non-Motor Symptoms in Parkinson Disease: Relationships with Motor Performance. APTA Combined Sections Meeting – Anaheim, CA. 2016.
14. McNeely ME, **Duncan RP**, Earhart GM. Differential Effects of Tango, Treadmill, and Stretching Interventions on Gait in People with Parkinson Disease. Rehabilitation Research at NIH: Moving the Field Forward – Bethesda, MD. 2016.
15. **Duncan RP**, McNeely ME, Earhart GM. Does Distance Walked after Two Minutes Predict Total 6 Minute Walk Test Distance in People with Parkinson Disease? International Congress of Parkinson’s Disease and Movement Disorders – Berlin, Germany. 2016.

16. **Duncan RP**, McNeely ME, Cavanaugh J, Dibble L, Ellis T, Ford M, Foreman KB, Earhart GM. Tracking Progression of Motor Signs and Quality of Life Based on Motor Phenotype in Parkinson Disease. IV STEP. Columbus, OH. 2016.
17. **Duncan RP**, McNeely ME, Earhart GM. Characterizing Maximum Step Length Test Performance in People with Parkinson Disease. World Parkinson Congress – Portland, OR. 2016.
18. Seidler KJ, **Duncan RP**, McNeely ME, Earhart GM. Relationship Between Gait and Reactive Postural Control in Fallers and Non-Fallers in Parkinson Disease. APTA Combined Sections Meeting – San Antonio, TX. 2017.
19. **Duncan RP**, Van Dillen LR, Garbutt JM, Earhart GM, McNeely ME, Perlmutter JS. Low Back Pain in Parkinson Disease: Impact on Motor Severity, Physical Activity, and Quality of Life. APTA Combined Sections Meeting –Platform Presentation – New Orleans, LA. 2018.
20. **Duncan RP**, Van Dillen LR, Rawson KS, Earhart GM, Perlmutter JS. Physical Therapy and Deep Brain Stimulation in Parkinson Disease: a Pilot Randomized Controlled Trial. International Parkinson and Movement Disorder Society International Congress – Philadelphia, PA (virtual). 2020.
21. Zajac JA, Cavanaugh JT, Colón-Semenza C, DeAngelis TR, **Duncan RP**, Hessler M, Nordahl T, Rawson KS, Shumate S, Earhart GM, Ellis TD. Life-space as an indicator of active mobility in persons with Parkinson disease. Platform Presentation. APTA Combined Sections Meeting (Virtual). February 2021.
22. Crumley M, Notestine T, Crouner BE, **Duncan RP**, Holleran CL, Bland M. Barriers to and Percentage of Vital Sign Assessment in an Outpatient Neurologic Physical Therapy Setting. American Physical Therapy Association – Combined Sections Meeting (Virtual). February 2021.
23. **Duncan RP**, Rawson KS, Cavanaugh JT, Colon-Semenza C, Deangelis T, Fulford D, LaValley MP, Mazzoni P, Nordahl T, Quintiliani LM, Saint-Hillaire M, Thomas CA, Earhart GM, Ellis TD. Relationship between low back pain-related disability and physical performance in people with Parkinson disease. International Parkinson and Movement Disorder Society International Congress – Virtual. 2021.
24. **Duncan RP**, Nordahl T, Baker T, Cavanaugh JT, Deangelis T, Fulford D, Giris J, Hessler MJ, LaValley MP, Saint-Hillaire M, Thomas CA, Ellis TD, Earhart GM, Rawson KS. Relationships Between Low Back Pain-Related Disability, Motor Capacity, and Executive Function in Parkinson Disease. American Physical Therapy Association – Combined Sections Meeting (San Diego, CA). February 2023.
25. Salerno EA, Saint-Maurice PF, Wan F, Peterson LL, Park Y, Cao, Y, **Duncan RP**, Troiano R, Matthews CE. Associations Between Accelerometry-Derived Physical Activity, Sedentary Behavior, and Mortality in NHANES Cancer Survivors. Society for Behavioral Medicine. Phoenix, AZ. April 2023.
26. **Duncan RP**, Nordahl T, Baker T, Cavanaugh JT, Deangelis T, Fulford D, Giris J, Hessler MJ, LaValley MP, Saint-Hillaire M, Thomas CA, Ellis TD, Earhart GM, Rawson KS. Does

Musculoskeletal Pain Impact Physical Activity in Parkinson Disease? World Parkinson Congress.  
Barcelona, Spain. July 2023.