

## Therapist Recertification Workshop

**Workshop Title: Designing Personalized Freezing of Gait Interventions to Benefit Both FOG and Functional Mobility**

**Date**

January 25, 2025

**Location**

Delivered via Zoom  
Eastern Time

**Workshop Fee**

\$350 per person

*Discounts available for groups of 2 or more*



**In this workshop you will learn to:**

- Appreciate the heterogeneity and the complexity of FOG and how that impacts our ability to identify “freezers / non-freezers” and capture their response to our clinical interventions.
- Develop personalized proactive and rescue-focused interventions for clients with FOG that are informed by a theoretical understanding of the mechanisms that underlie FOG.

**Who is eligible?**

- Physical Therapists, Physical Therapy Assistants
- Occupational Therapists, Occupational Therapy Assistants
- PT, PTA, DPT, OT, OTA students

For additional information see the PWR! Workshop registration page



501(C)3 Non-Profit Organization

**Are continuing education hours offered?**

For details see the continuing education information page at <https://www.pwr4life.org/ceu-information/>

Earn 5-6 contact hours

My Time	Eastern Time	Topic
	10:00 am	<b>Welcome and Housekeeping</b>
	10:15 am	<b>Freezing of Gait (FOG) Introduction</b> <ul style="list-style-type: none"> <li>• Terminology and Phenomenology</li> <li>• FOG / Festination vs. Non-Gait Freezing / Festination</li> </ul>
	10:55 am	<b>Mechanisms Underlying FOG and Implications for Intervention</b> <ul style="list-style-type: none"> <li>• Interference - Decreased reserve leads to crosstalk</li> <li>• Threshold - Gait instability</li> <li>• Decoupling - Posture with gait</li> <li>• Cognitive - Frontal executive dysfunction</li> <li>• Sensory-perceptual processing deficits</li> </ul>
	<b>12:20 pm</b>	<b>Break</b>
	12:30 pm	<b>Implications of FOG on Functional Mobility</b> <ul style="list-style-type: none"> <li>• Techniques and training tools for learning and retention</li> <li>• New paradigms of ongoing access to rehab and exercise for life</li> </ul>
	12:50 pm	<b>Video Case Study #1</b> <ul style="list-style-type: none"> <li>• Assessment considerations and Level 3 goals for a <u>single</u> plan of care</li> <li>• Level 1-2-3 sample activities for addressing Level 3 goals</li> </ul>
	<b>2:00 pm</b>	<b>Break</b>
	2:10 pm	<b>Video Case Study #2</b> <ul style="list-style-type: none"> <li>• Assessment considerations and changing Level 3 goals <u>over time</u></li> <li>• Level 1-2-3 sample activities for addressing Level 3 goals <u>over time</u></li> </ul>
	3:15 pm	<b>Q&amp;A</b>
	3:30 pm	<b>End of PWR!Moves Therapist Freezing of Gait Recertification Workshop</b>

Most people (~80%), if not all, persons with PD (PwPD) will experience freezing of gait (FOG) as the disease progresses into advanced stages. However, 21% to 27% of PwPD report FOG even in the early stages. This presentation will define the terminology and complex phenomenology underlying FOG. Participants will appreciate how this greatly interferes with research studies trying to clearly identify freezers from non-freezers so that we can better understand the data, the underlying mechanisms and the response to therapeutic interventions.

Participants will be introduced to screening tools and assessments that can be used for early identification or for therapy outcomes after FOG-focused interventions. We will review 5 theoretical hypotheses (models) to help understand the pathophysiology underlying FOG. These will include the categories of: Interference, Threshold, Decoupling, Cognitive or Sensori-perceptual. For each model, we will first discuss examples of behaviors that we may be able to observe or elicit in the clinic that support different models and how that can provide insight for designing interventions.

As we go through the models, we will introduce current research supporting interventions that may address one or more of these models. Emphasis will be on a recent meta-analysis that suggests that rehabilitation that targets multiple behavioral training modes related to 1) reducing the frequency or emergence of FOG episodes (proactive goals) and 2) circumventing and alleviating imminent FOG episodes (rescue goals) are efficacious. Altogether, these studies support the importance of starting early, incorporating cognitive strategies, challenging the intensity and complexity of training, targeting aerobic exercise to enhance neuroplasticity and addressing the unique challenges of sustained practice.

The severity of functional mobility impairment in PwP is affected by dopamine-dependent disturbances that alter cortico-striatal networks and interfere with the ability to express habitual-automatic actions in complex real-world scenarios. Therefore, each of the proposed mechanisms that underlie FOG; may also contribute to the loss of automaticity and the deterioration of functional mobility. In addition, freezing and festination can occur in non-gait functions that require repetition and/or coordination across limbs or multiple structures like speech, repetitive finger or hand movements, bilateral reach and grasp movements, and during upper or lower limb floor crawling movements.

For that reason, we propose that FOG interventions should consider the impact FOG has on ALL aspects of functional mobility. We will use Video case studies (n=2) to illustrate how FOG-specific interventions can be integrated within the PWR!Moves® Retrain Functional Mobility Framework allowing therapists to address personalized goals related to FOG but also everyday mobility and transfers in multiple positions or environments (home, work, recreation, community group exercise). Assessments used in the case studies, role of instruction, sensory feedback, use of simple multipurpose equipment and dosage consideration will be highlighted as part of case study discussion.

**Upon successful completion of this workshop, participants will be recertified as PWR!Moves Certified Therapists for another three years!**

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## Methods of Instruction

- Brief lectures with time for Q&A and response to chat.
- Pre-recorded video cases (n=2) showing therapists implementing the curriculum with people with PD of varying disease severity with freezing of gait.
- Faculty led group discussion to answer questions and review highlights for each video case study.

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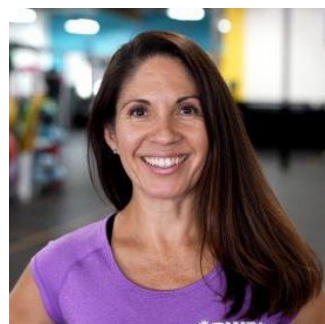
### Course Objectives

- Develop personalized functional mobility interventions for clients with FOG that include FOG-specific motor and cognitive challenges.
- Interpret the proposed mechanisms that underlie FOG to inform your clinical reasoning for designing and prioritizing FOG proactive and rescue-focused goals and activities.
- Utilize assessments and interview techniques that may help characterize and capture FOG and non-gait freezing episodes for early identification, setting goals and demonstrating therapy outcomes.
- Use training tools related to cueing, instruction, feedback, aerobic priming, and simple equipment to optimize quality of movement and learning.
- Recognize the importance of dosage and sustained practice



### **Becky G. Farley, PT, MSPT, PhD**

Dr. Becky Farley is a physical therapist, neuroscientist, Parkinson exercise specialist, Chief Scientific Officer and Founder of Parkinson Wellness Recovery | PWR!. She received a PhD in Neuroscience from the University of Arizona, a Master of Science in Physical Therapy from the University of North Carolina, and a Bachelor of Physical Therapy from the University of Oklahoma. She is a published author on exercise for people with Parkinson disease and gives public and medical seminars worldwide. Her postdoctoral research investigated the muscle activation deficits underlying bradykinesia in people with PD. She was awarded, and completed, an R21 NIH-funded randomized clinical trial to establish the benefits of LSVT BIG®, the first whole-body, amplitude-focused, physical and occupational therapy exercise approach for individuals with PD. Dr. Farley also created PWR!Moves®, a more flexible Parkinson-specific exercise approach that directly targets the training of amplitude into building blocks of function. Each building block counteracts a primary motor control deficit shown by research to interfere with everyday mobility. Dr. Farley has been training therapists and fitness professionals for the last 20 years and is now focusing on publishing data from the Tucson-based PWR!Gym and integrating new research into PWR!Moves workshops and PWR!Gym programs. She believes lifelong access to integrated rehabilitation and community exercise and wellness programming is necessary to optimize and perpetuate functional mobility benefits and to slow disease progression.



### **Jennifer Bazan-Wigle, PT, DPT, CEEAA®**

Jennifer Bazan-Wigle has worked in neurological rehabilitation for the entirety of her physical therapy career. She is currently a physical therapist at Parkinson Wellness Recovery's PWR!Gym in Tucson, AZ, where she specializes in one-on-one rehabilitation and group exercise instruction with people with Parkinson disease. Since 2013, she has focused on honing her expertise in treating the movement disorder and Parkinson's population, emphasizing freezing of gait and advanced PD. Jennifer is a PWR! Moves Certified Therapist, PWR!Moves Certified Instructor, and a Certified Exercise Expert for the Aging Adult (CEEAA). Jennifer has delivered community, academic, and peer-reviewed presentations on Parkinson disease in the US and internationally. As an integral part of the PWR! Faculty, Jennifer has worked closely with Dr. Becky Farley to develop course content for PWR!Moves Therapist and Instructor Training and Certification Workshops, and has delivered over 100 continuing education workshops, across the US and world. In doing so, Jennifer has helped thousands of physical therapists, occupational therapists, and fitness professionals implement evidence-based rehabilitation and group exercise for people with Parkinson disease.



### **Shelley Hockensmith, PT, MPT**

Shelley Hockensmith is a physical therapist with over 20 years of experience in outpatient neurological rehab settings. She graduated from the University of Evansville with her MPT in 2003 and in 2008 became a Board Certified Neurologic Clinical Specialist re-certifying in 2018. She has experience in private practice and hospital-based multi-disciplinary neurologic teams working with people with neurological disorders such as stroke, multiple sclerosis, brain injuries, spinal cord injuries, and movement disorders. She also was fortunate to work in a specialized vestibular and balance disorder clinic as both clinician and coordinator with a team of audiologists and physical therapists. As an avid believer in the power of exercise for people with Parkinson Disease, she became certified in LSVT BIG in 2007, attended one of the first PWR!Moves workshops, and eventually began working at the PWR!Gym in 2019 as a PWR! Moves Certified Therapist. She joined the PWR!Moves faculty in 2022.



### **Emily Borchers PT, DPT**

Emily Borchers is a physical therapist with almost 10 years of experience working with people with Parkinson disease throughout her career. After graduating from the Ohio State University with her DPT in 2014, she began working as a physical therapist at the PWR!Gym® in Tucson, AZ where she developed a passion for helping people with Parkinson disease. In her 7 years of working at the PWR!Gym, she specialized in providing one-on-one rehabilitation and group exercise instruction for people with Parkinson disease, assisted with research conducted at the PWR!Gym including a peer-reviewed publication and

was Physical Therapy Manager where she learned how to navigate Medicare reimbursement issues to meet the ongoing rehabilitation needs of people with Parkinson disease. Emily also has experience working with people with Parkinson disease and other neurological conditions including stroke, brain injury, and spinal cord injury in the inpatient rehab setting as part of an interdisciplinary team. She now works at Banner Alzheimer's Institute in Tucson, AZ where she continues to develop her skills in working with people with Parkinson disease and other cognitive diseases including Alzheimer's and Lewy Body Dementia for outpatient rehabilitation services. She joined the PWR! Faculty in 2023. Emily is passionate about empowering people with Parkinson disease and implementing a proactive approach to ongoing rehabilitative and exercise services for improved quality of life.



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