

PWR!Moves®

Instructor Certification Workshop

Date

October 7-8, 2023

Location

Delivered via Zoom
Arizona Time Zone

Workshop Fee

\$550 per person

Discounts available for groups of 2 or more



What will you learn?

- ◆ How PWR!Moves can be integrated into functionality and daily tasks during your class activities
- ◆ How to implement Parkinson-specific skill training into any of your exercise programs
- ◆ Why it is significant to target functional skills as part of a multi-modal fitness for persons with Parkinson's
- ◆ How to use the PWR!Moves to support your community exercise programs
- ◆ How exercise is critical to people with Parkinson's according to recent advances in neuroscience.

Who is eligible?

NCCA recognized eligibility criteria

- ◆ Certified Personal Trainers
- ◆ Group Fitness/Exercise Instructors
- ◆ Strength and Conditioning Specialists
- ◆ Athletic Trainers (ATC)
- ◆ Recreational Therapists (CTRS)
- ◆ Exercise Physiologists with a current certification recognized by NCCA

Non-NCCA recognized eligibility criteria

- ◆ Physical Therapists, Physical Therapist Assistants
- ◆ Occupational Therapists, Occupational Therapist Assistants
- ◆ Kinesiotherapists (RKT) with state licensure or certification
- ◆ Yoga teachers* are required to have completed at least a 200-hour yoga teacher training program
- ◆ Pilates instructors* are required to have completed at least a 450-hour Pilates teacher training program

**Not all programs may be eligible; please contact PWR! Education department to determine eligibility*

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/>

American Council on Exercise (ACE) - Approved for 1.4 CEC
American College of Sports Medicine (ACSM) - Approved
Athletics and Fitness Association of America (AFAA) - Pending approval
National Academy of Sports Medicine (NASM) - Pending approval
National Council on Strength and Fitness (NCSF) - Pending approval
National Strength and Conditioning Association (NSCA) - Approved for 1.6 CEC

Time to Complete*	Module
60 minutes	Fundamentals of Parkinson disease
	Fundamentals of Parkinson disease—Knowledge check
45 minutes	Fundamentals of Parkinson disease (part 2)
	Fundamentals of Parkinson disease—Knowledge check (part 2)
35 minutes	Therapeutic options for PWP: Medications
	Therapeutic options for PWP: Medications —Knowledge check
30 minutes	Therapeutic options for PWP: Technology
	Therapeutic options for PWP: Technology —Knowledge check
80 minutes	Exercise for brain health, neuroprotection and neuroplasticity
	Exercise4BrainChange and Practice Essentials —Knowledge check
30 minutes	Leadership: Interprofessional communication and building relationships
	END OF PREWORK

****Total anticipated completion time for each participant: 4.75 hours***

- You may complete this prework in multiple sittings and it is designed to be flexible to fit your schedule.
- Plan to complete all prework within 30-days of first access.
- The slides being discussed are included in your workshop manual.
- The PWR!Moves Instructor workshop is a CE course, and you will be asked to complete any part of the prework that is missing before PWR! can issue your certificate of completion.

My Time	AZ Time	Topic
	7:30 am	Login to the Workshop
	8:00 am	Welcome / Housekeeping / Getting to Know You / Workshop goals
	8:15 am	Group Practicum #1- Time to PWR! Up, Let's do it <ul style="list-style-type: none"> • Standing PWR!Moves warm up • Connect to fitness domains
	9:15 am	Break
	9:30am	Group Practicum #2 - Interactive Faculty instruction <ul style="list-style-type: none"> • Level 1 - Make Function Exercise • Modifications for optimal quality • Boosts and more examples
	11:30 am	Group Practicum #3 Virtual Breakouts for Assignments and teaching demo
	12:00 pm	Long Break
	1:00 pm	Group Practicum #4a - Interactive Faculty Instruction <ul style="list-style-type: none"> • Level 2 - Rehearse Action Sequences • Multi-Symptom methods of instruction • Flow and Boosts • Horizontal Mobility
	2:15 pm	Group Practicum #4b - Interactive Faculty Instruction <ul style="list-style-type: none"> • Level 2 - Rehearse Action Sequences • Vertical Mobility • Multidirectional progressions • Functionality
	2:45 pm	Discussion - Building your Level 1 & 2 Class
	3:00 pm	Break
	3:15 pm	Achieving Optimal challenge points across Levels 1-2 <ul style="list-style-type: none"> • Review types of feedback and cues • Discuss considerations of physical effort and cognitive challenge
	3:45 pm	Group Practicum #5 - Interactive Faculty Demo <ul style="list-style-type: none"> • Faculty demo 3-4 sample class activities for each level • Discussion and Q&A
	4:15 pm	Boosts (breath, hands, voice, eyes and face) - rationale in PD for each boost
	4:55 pm	<ul style="list-style-type: none"> • Reviews / Q&A • PWR! Pearls for tomorrow
	5:00 pm	End of Day 1

My Time	AZ Time	Topic
	7:30 am	Login to the Workshop
	8:00 am	Welcome Back - PWR!Pearls
	8:15 am	Level 3 - Rebuild Physical Activity <ul style="list-style-type: none"> Functional Fitness
	8:20 am	Fitness Components - Interactive Practicum / Discussion <ul style="list-style-type: none"> #1 Strength (Research insights and designing activities) Repeat for all other fitness domains (#2 Balance, #3 Agility, #4 Flexibility, and #5 Aerobics)
	9:45 am	Break
	10:00 am	Group Practicum #6 - Let's Practice Together <ul style="list-style-type: none"> Interactive Faculty group instruction using multi-modal PWR! Moves group class template and hi and low modifications Class set-up and design considerations
	11:30 am	Long Break
	12:30 pm	Teaching Strategies <ul style="list-style-type: none"> Fall Risk considerations Movement considerations Medications Deep Brain Stimulation (DBS) Non-Motor considerations
	1:15 pm	Teaching Essentials <ul style="list-style-type: none"> Getting Started (Logistics, Forms) Multilevel class criteria (Recommendation form)
	2:15 pm	Logistical / Legal Risk Factors <ul style="list-style-type: none"> Emergency Plan Incident reporting Red flags / Yellow flags
	2:30 pm	Emotional Engagement / Psychosocial Considerations <ul style="list-style-type: none"> Barriers to increased physical activity and exercise Behavioral change resources
	3:00 pm	Break
	3:15 pm	Interactive Practicum - Decision-Making / Leadership <ul style="list-style-type: none"> Video Cases Discussion topics—hard conversations, rehab and wellness
	4:15 pm	Leadership as a PWR!Moves Certified Instructor
	4:30 pm	Better Together <ul style="list-style-type: none"> Rehabilitation and Exercise for a Lifetime Elevator Pitch—program summary What you will be doing What you will get from PWR!
	4:45 pm	Q&A
	5:00pm	End of Day 2

Recent advances in Parkinson disease (PD) basic and clinical science research suggest both physical rehabilitation and exercise have symptomatic benefits, increase the efficacy of antiparkinsonian medication, and result in motor and cognitive improvements. However, maintenance (not necessarily the intensity) of physical activity and exercise habits is necessary to slow the motor and cognitive deterioration and lower mortality. Our goal is to prepare exercise professionals to collaborate with their local PD-specialized physical and occupational therapists and show leadership as part of the healthcare team to keep persons with PD (PWP) moving back and forth from rehabilitation to exercise and back to rehab for life. Our course objectives and curriculum meet the Criteria for Exercise Education Programs and address the Competencies for Exercise Professionals recently developed by the Parkinson Foundation.

Exercise professionals will gain a basic understanding of PD and learn to use our PWR!Moves curriculum to design and implement group exercise or personal training programs for PWP that integrate PD-specific functional skill training into a multimodal fitness program. We believe that by focusing on the same fundamental PD-specific skills and method of training in rehab and group exercise and cycling back and forth between disciplines for life, it may be possible to extend the benefits of rehabilitation and reap the additive and complementary benefits of group exercise programs necessary to slow motor and cognitive deterioration and lower mortality.

To guide exercise professionals in how to design and implement functional skill training in community exercise settings we have created a framework with three training levels that build in complexity and provide methods of instruction to address multiple symptoms of PD. In Level 1, function is deconstructed into the four foundational building blocks (Basic 4 | PWR!Moves). The focus is on two instructional methods: Prepare, the mindful rehearsal of quality whole-body large amplitude movements to target rigidity; and activate, the progression of movements into high-effort, repetitive exercise to target bradykinesia. In Level 2, the focus shifts to rebuilding action sequences that simulate meaningful multidirectional overground movements and transitions (mobility) and daily physical activities (functionalities), an instruction method we call Flow to target incoordination. In Level 3, the focus shifts to training PWP like functional athletes by integrating Level 1 & 2 activities and methods into multimodal fitness classes or personal training programs (i.e., aerobics, strength, balance, agility, flexibility).

These functional fitness programs are designed to improve fitness (aerobics, flexibility, strength, balance, agility), reduce PD symptoms and improve mobility and function. Participants will learn to apply PD-specific coaching and feedback (instructional, cues, reward-based) and simple equipment to achieve optimal motor and cognitive challenges. They will be able to adapt programming for individuals of varying disease severity and integrate these PD-specific functional skills into other types of physical activity like yoga, boxing, Pilates, and sports depending upon their own areas of expertise.

Upon successful completion of this workshop, participants will be certified as PWR!Moves Certified Instructors for three years.

- Pre-recorded webinars
- Lectures with integrated polls and response to chat.
- Interactive practicums with faculty whole group instruction to practice the PWR!Moves fundamentals that include face to face demonstrations and feedback (via zoom) with time for integrated questions and answers throughout the practicum.
- Interactive faculty instruction with feedback (Q&A, chat, polls) to show modifications (adaptations, progressions)
- Interactive faculty demos (live or recorded) teaching specific activities and examples of group classes adapted for different levels of fitness
- Break-out sessions for participants to interact with other participants and then demonstrate their assigned activity to the whole group with time for feedback and Q&A.
- De-briefing practicums with chat and time to answer questions and discuss highlights.
- Group decision-making using videos of PWP of different disease severity performing different functional fitness activities to stimulate a discussion about how to optimize quality, safety and physical and cognitive challenge in the different scenarios provided.

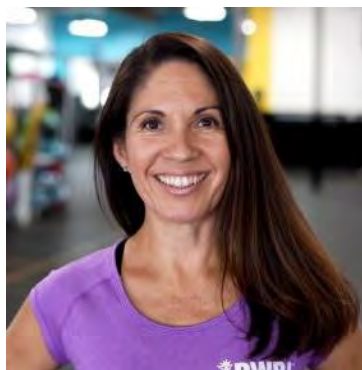
Upon completion of the course, participants will be able to:

1. Apply their basic understanding of Parkinson disease to be able to discuss the range of motor and nonmotor symptoms with people with PD and their care partners.
2. Describe the type of available medical, rehabilitation, and neurosurgical treatments options available for People with Parkinson (PwP)
3. Describe how medications, deep brain stimulation, and symptoms (motor and non-motor) may affect an individual's ability to participate in and benefit from exercise.
4. Summarize recent advances in basic and clinical neuroscience that have brought exercise to the forefront in PD treatment as it relates to the importance of aerobics and skill training.
5. Recognize the importance of building relationships and collaborating with healthcare and wellness providers in the community, as well as understand the responsibility as a community exercise professional to work within their scope of practice.
6. Explain how the PWR!Moves® target motor control skills that become impaired in people with PD and interfere with function.
7. Explain how different methods of instruction (PREPARE, ACTIVATE, and FLOW) target the primary symptoms of PD.
8. Teach the PWR!Moves in different positions (prone, supine all 4's, sitting, standing) in a group or personal training setting.
9. Demonstrate how PWR!Moves in different positions may be modified (adapted, regressed, progressed) for individuals with different disease severity levels or comorbidities.
10. Discuss how PWR!Moves can be integrated into mobility/functionality/daily tasks/lifestyle during a class activity.
11. Apply Exercise4BrainChange® techniques within class design to achieve the optimal physical effort and cognitive challenge for each class.
12. Describe how functional skills can be integrated into the domains of strength, balance, agility, aerobics and flexibility.
13. Explain why PWR! Boosts are important in a PD-specific exercise program and be able to integrate them into an exercise activity or develop as a stand-alone activity
14. Anticipate high-risk fall scenarios and be prepared to reduce fall risk from a variety of strategies (e.g., instructions, cues, equipment, class organization).
15. Optimize quality of practice by using equipment, modeling, mental imagery, voice, cues, instruction, and reward-based feedback to achieve optimal alignment, motor output (effort), and engagement.
16. Develop and perform a consultation/screening/assessment process to be able to determine fall risk and make recommendations to the most appropriate class based on class fall risk criteria, starting with high or low ability options.
17. Appropriately consider additional information such as motor and non-motor symptoms and environmental, personal, and psychosocial factors when developing exercise plans.
18. Design and PWR!Moves class or personal training templates for high or low ability while considering risks (e.g., number of participants, environment, fitness and mobility of participants)
19. Be prepared to respond to medical or safety incidents; distinguish between emergency and non-emergency incidents, and when a medical release is necessary to return to exercise.
20. Understand how to mitigate your risks by working closely with your PD-specialized therapist or others in your interprofessional team, track changes in health status, implement strategies in class set-up and design and communicate through caring and honest conversations with PwP and their partners.
21. Explain how PWR!Moves may be implemented across settings (therapy or community) and reinforced in other community research-based exercise programming (e.g., treadmill, cycling, pole walking, yoga, boxing, dance, Tai Chi).



Becky G. Farley, PT, MS, PhD

Dr. Becky Farley is a physical therapist, neuroscientist, Parkinson exercise specialist, as well as the 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 14 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, with an emphasis on 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 NeuroFit 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 70 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.



Sarah Palmer, MS, Exercise Physiologist, CSCS

Sarah is the owner and lead fitness trainer of **foreverfitness** personal training company in Cincinnati, OH, that includes in studio, in home, virtual and on-demand exercise classes. She has been working as an exercise professional since 1994. Sarah has specialized in working with people with Parkinson's and brings the experience, knowledge and access to a global team of experts in the field as well as continued advance training in PD-specific exercise including PWR! Moves Instructor, Rock Steady Boxing Coach, Delay the Disease, Allied Team Training for Parkinson's (ATTP), Brian Grant Foundation Parkinson Exercise Training for Professionals and is Certified Strength and Conditioning Specialist (CSCS). She is a member of the MedFit Network as a Medical Fitness professional and a member of NeuroSpark Network. She donates her time to the PWR! Retreat each year in Arizona, has been a featured speaker at the Sunflower

Rev it Up for Parkinson's Symposium and Expo, serves on their planning committee and co-presented at the Rock Steady Boxing Coach Conference in 2018. She is a Parkinson's Foundation Aware In Care Ambassador, participated in the Policy Forum in Washington, D.C. in the fall of 2019 to advocate for Parkinson's, and was on the Competency Development Committee for the Parkinson's Foundation to establish competencies for Exercise Professionals who work with people with Parkinson's disease. Her father had Parkinson's disease and this personal experience continues to inspire and motivate her professionally.



Nancy Nelson, ACE-CPT Parkinson Disease Exercise Specialist

Nancy Nelson has over 30 years of experience in the health and wellness industry. An avid proponent of continued education and training, she holds numerous credentials, including an ACE Personal Trainer certification, Rock Steady Boxing certification, Delay the Disease certification, Brian Grant Foundation training, Group Exercise Instructor training, Tai Ji Quan Moving for Better Balance (TJQMMB) training and is a Parkinson Exercise Specialist. For the past 15 years, Nancy has worked almost exclusively with people with Parkinson disease. In 2009, Nancy founded her company, PDEX, LLC, to offer group classes and personal training for people with Parkinson's throughout Portland, Oregon. During this time, she also taught evidence-based programs and conducted research projects with a focus on

patients with Parkinson's disease and cancer for both Oregon Health Sciences University and the Oregon Research Institute. In 2016, Nancy moved to Tucson to take a role as Exercise Therapy Manager for Parkinson Wellness Recovery (PWR!). In 2019, Nancy joined PWR!'s professional education faculty to train and share her expertise with participants across the US.

Most recently, Nancy and her husband relocated to Bend Oregon to be closer to family. She has continued her relationship with PWR! by teaching virtual classes and doing one on one wellness consultations. Nancy was thrilled to be able to resume her relationship with OHSU's Get Fit Prostate team in September 2020, teaching TJQMMB. In addition, she is a coach for Rock Steady Boxing Bend and does personal training for people with Parkinson disease in her community. Outside of the gym, Nancy loves cycling, hiking, cooking, and her two English Springer Spaniels, Kimber and Hazel.

1. Ahlskog JE. Aerobic Exercise: Evidence for a Direct Brain Effect to Slow Parkinson Disease Progression. *Mayo Clinic Proceedings*. 2018;93(3):360-372. doi:10.1016/j.mayocp.2017.12.015.
2. Alberts JL, Phillips M, Lowe MJ, et al. Cortical and Motor responses to acute forced exercise in Parkinsons disease. *Parkinsonism & Related Disorders*. 2016;24:56-62. doi:10.1016/j.parkreldis.2016.01.015
3. Borchers EE, McIsaac TL, Bazan-Wigle JK, et al. A physical therapy decision-making tool for stratifying persons with Parkinson's disease into community exercise classes. *Neurodegener Dis Manag*. 2019;9(6):nmt-2019-0019. doi:10.2217/nmt-2019-0019
4. Bouca-Machado R, Maetzler W, Ferreira JJ. What is functional mobility applied to Parkinson's disease. *J Parkinson Disease* 2018;8:121-130.
5. Bouça-Machado R, Venturelli M, Tinazzi M, et al. Treating Patients Like Athletes: Sports Science Applied to Parkinson's Disease. *Front Neurol*. 2020;11:228. doi:10.3389/fneur.2020.00228
6. Cascaes da Silva F, Iop Rda R, Domingos dos Santos P, et al. Effects of Physical-exercise-based rehabilitation programs on the quality of life of patients with Parkinson's disease: A systematic review of randomized controlled trials. *J Aging Physical Activity* 2016;24(3):484-496.
7. Duchesne C, Lungu O, Nadeau A, et al. Enhancing both motor and cognitive functioning in Parkinson's disease: Aerobic exercise as a rehabilitative intervention. *Brain Cognition* 2015;99:68-77.
8. Farley BG, Koshland GF. Training BIG to move faster: the application of the speed–amplitude relation as a rehabilitation strategy for people with Parkinson's disease. *Experimental Brain Research*. 2005;167(3):462-467. doi:10.1007/s00221-005-0179-7
9. Ferrazzoli D, Ortelli P, Madeo G, et al. Basal ganglia and beyond: The interplay between motor and cognitive aspects in Parkinson's disease rehabilitation. *Neuroscience & Biobehavioral Reviews*. 2018;90:294-308. doi:10.1016/j.neubiorev.2018.05.007
10. Hirsch MA, Farley BG. Exercise and neuroplasticity in persons living with Parkinson's disease. *Eur J Phys Rehabil Med*. 2009;45(2):215-229.
11. King LA, Horak FB. Delaying Mobility Disability in People With Parkinson Disease Using a Sensorimotor Agility Exercise Program. *Phys Ther*. 2009;89(4):384-393. doi:10.2522/ptj.20080214
12. Lauze M, Daneault JF, Duval C. The effects of physical activity in Parkinson's disease: A review. *J Parkinson's Disease* 2016;6:685-698.
13. Mak MK, Wong-Yu IS, Shen X, et al. Long-term effects of exercise and physical therapy in people with Parkinson disease. *Nat Rev Neurol*. 2017;13(11):689-703. doi:10.1038/nrneurol.2017.128
14. Sacheli MA, Murray DK, Vafai N, et al. Habitual exercisers versus sedentary subjects with Parkinson's Disease: Multimodal PET and fMRI study. *Mov Disord*. 2018;33(12):1945-1950. doi:10.1002/mds.27498
15. Marinelli L, Quartarone A, Hallett M, et al. The many facets of motor learning and their relevance for Parkinson's disease. *Clin Neurophysiol* 2017;128:1127-1141.
16. Onla-Or S, Winstein CJ. Determining the optimal challenge point for motor skill learning in adults with moderately severe Parkinson's disease. *Neurorehabil Neural Repair*. 2008;22(4):385-395.
17. Petzinger GM, Fisher BE, McEwen S, et al. Exercise-enhanced neuroplasticity targeting motor and cognitive circuitry in Parkinson's disease. *Lancet* 2013;12:716-726.
18. Sacheli MA, Neva JL, Lakhani B, et al. Exercise increases caudate dopamine release and ventral striatal activation in Parkinson's disease. *Mov Disord*. 2019;34(12):1891-1900. doi:10.1002/mds.27865
19. Schootemeijer S, van der Kolk NM, Ellis T, et al. Barriers and Motivators to Engage in Exercise for Persons with Parkinson's Disease. *J Parkinsons Dis*. 2020;10(4):1293-1299. doi:10.3233/JPD-202247
20. Wulf G, Lewthwaite R. Optimizing performance through intrinsic motivation and attention for learning: The OPTIMAL theory of motor learning. *Psychon Bull Rev*. 2016;23(5):1382-1414. doi:10.3758/s13423-015-0999-9
21. Zemankova P, Lungu O, Bares M. Psychosocial Modulators of Motor Learning in Parkinson's Disease. *Front Hum Neurosci*.

PWR! uses the latest research to inform our programs, workshops and resources.

The full body of research referenced during the workshop is updated regularly and can be viewed at:
pwr4life.org/Parkinson-research