

Train Amplitude and Make FUNction Exercise[®]

Date

March 23-24, 2018

Location

PWR!Gym
140 W. Fort Lowell Rd.
Tucson AZ, 85705



Target Audience Required for Certification

Certified Personal Trainers, Group Fitness Instructors, KT's PT's, PTA's, OT's, COTA's.

Individuals holding a 2/4-year degree in health, exercise science, recreation or physical activity related field with 2 years of experience in the field.

Approved for 1.5 CEC's:

American Council on Exercise (ACE)
National Academy of Sports Medicine (NASM)
American Academy of Sports Medicine (ACSM)
British Columbia Recreation & Parks Association

Registration Fees

\$475 per person

Group Discounts: \$425 per person for 2 or more from same facility
\$50 Late Fee (if registering after registration deadline – check availability)

Implement PD-Specific Research-Based Exercise Programs NOW
Help People with Parkinson Disease get BETTER and
STAY BETTER with Exercise.

For more information call Vanessa at 520-591-5346, or to register online, visit www.pwr4life.org

PWR!Moves® Instructor Training and Certification Workshop Course Description:

Recent advances in basic and clinical science research suggest exercise and learning approaches that promote **aerobics and skill acquisition** may protect vulnerable neurons, repair damaged circuits, and optimize function in persons with Parkinson disease (PD). Participants will learn a PD-specific approach to skill acquisition called **PWR!Moves®**. **PWR!Moves®** is a stand-alone exercise program that can also be integrated into other exercise approaches. The Basic4 | **PWR!Moves® (UP/ROCK/TWIST/STEP)** are building blocks for everyday movement and are always performed with large amplitude, high effort, and attention to action in multiple positions (floor/sitting/standing). Participants will learn how to use these foundational **PWR!Moves®** exercises to target symptoms that interfere with everyday movement.

- **Rigidity:** **PWR!Moves®** are performed slowly, rhythmically and with sustained effort.
- **Bradykinesia:** **PWR!Moves®** are performed as fast as possible with repetitive high effort.
- **Incoordination:** **PWR!Moves®** are linked together into longer and longer sequences that mimic everyday movements.
- **Automaticity,** **PWR!Moves®** are progressed in complexity through the addition of common dual tasks (**PWR!Boosts**).

This course will provide participants with the background and unique skills to teach an evidenced based PD-specific approach in group or personal training. Participants will learn two group formats (**PWR!Moves®** Group or **PWR!Moves®** Circuit). Both of these class formats can be adapted for individuals with minimal to moderate levels of disease severity. Participants will have the opportunity to practice the **PWR!Moves®**, develop class activities, and teach **PWR!Moves®** classes while interacting with **PWR!** faculty and people with Parkinson disease during the workshop. Participants will also be introduced to how to implement essential principles of learning and neuroplasticity founded upon research in the fields of exercise science, motor control, and motor learning. These essential principles are the “how” of what you do to achieve optimal benefit to quality of life, function, symptoms, and slowing the progression of PD. Instructors will learn to use the group structure and their feedback and instructional methods to empower and educate class participants about their true potential. Emphasis will be on promoting an environment for learning that embraces an atmosphere of empowerment, motivation, social enrichment, and **FUN**ction! The goal for individuals with PD is that they not only improve their performance in the class, but that they learn to recognize when they need to self-correct their slow/small movements for better movement, posture and balance in everyday life.

Objectives/Goals:

- 1) Possess general knowledge about PD to include: who gets it, what causes it, major symptoms, and how it impacts FUNCTION (mobility, balance, flexibility, and coordination) in individuals with PD.
- 2) Describe how medications, deep brain surgery, and symptoms (non motor/motor) may affect an individuals' ability to participate in, or benefit from exercise.
- 3) Explain the significance of targeting the training of amplitude into function (**PWR! Moves®**) as the foundation for a PD-specific program.
- 4) Teach the Basic4 | **PWR! Moves®** in different positions in a group format: floor prone/supine, all4's, sitting, standing.
- 5) Be able to explain how the goals of PREPARE/ACTIVATE/FLOW target the primary symptoms of PD and include examples of each.
- 6) Identify how each of the Basic 4 | **PWR! Moves®** target common PD-specific problems related to flexibility, strength, coordination, balance, and posture in different positions.
- 7) Demonstrate how each of the **PWR! Boosts** can be integrated into **PWR! Moves®** exercises and be prepared to discuss why their purpose, or why they are important.
- 8) Able to use modeling, mental imagery, voice, cues, instruction, and reward-based feedback to achieve optimal alignment motor output (effort), and engagement.
- 9) Discuss how **PWR! Moves®** can be integrated into function/ADL/lifestyle during a class at least 3 times.
- 10) What is the significance that **PWR! Moves®** may be implemented across settings (therapy/community), and reinforced in other community research exercise programming (treadmill, cycling, pole walking, yoga, boxing, dance, Tai Chi).
- 11) Demonstrate how **PWR! Moves®** in different positions may be adapted for individuals with different disease severity levels.
- 12) Integrate the **PWR! Moves®** into a circuit format using more typical fitness equipment or approaches that require individuals to work more independently, discuss goals of that activity, and demonstrate how it may be progressed in difficulty or complexity for different individuals.
- 13) Describe high risk for fall activities and what you would do to reduce the risk of falls during a class (i.e., attentional strategies, cues, equipment, class organization, feedback, and modeling/mental imagery).
- 14) Identify screening or assessments that could be used to establish class criteria, and to show outcomes related to quality of life, function, endurance, etc.

Agenda: PWR! INSTRUCTOR WORKSHOP SCHEDULE - DAY 1

7:30 am	Registration
8:00	PWR! and Exercise4BrainChange Rationale for Parkinson disease
9:15	BREAK
9:30	Overview of PD/Symptoms
10:45	Intro to Basic 4 PWR! Moves® - Lecture
11:15	Intro to Basic 4 PWR! Moves® Group Practice Standing PWR! Goals: Prepare/Activate/Flows/Boosts/Common Problems
12:00	LUNCH (On your own)
1:00 pm	Basic 4 PWR! Moves® Master Demo Class – observe/participate PWR! Moves Checklist / Template #1 INTRO Class
2:00	Highlights/Discussion of Basic 4 PWR! Moves® Group Demo Class Common Problems/Goals/Symptoms/Safety
2:15	Intro to Basic 4 PWR! Moves® - Group Practice PWR! Goals: Prepare/Activate/Positional & Evolution Flows/Boosts
3:30	BREAK
3:45	Intro to Basic 4 PWR! Moves® - Group Practice PWR! Moves class description/templates/adaptations/variations PWR! Walking/Cardio/Progressions
4:30	Teach us a PWR! Move! - Group Class Activity <ul style="list-style-type: none"> • Use Sec. 2 to practice a “prepare” and “activate” and focus on a “boost”
4:45	Practical – Putting it all together <ul style="list-style-type: none"> • Participation – instruct the group on your PWR! Move
	Teaching Tips/ PWR! Moves® Class “Variations”
5:30	END

Agenda: PWR! INSTRUCTOR WORKSHOP SCHEDULE - DAY 2

8:00	Intro to learning principles – Exercise4BrainChange techniques
8:45	Overview typical PWR! Moves CIRCUIT Format <ul style="list-style-type: none"> • Introduce equipment and demo a circuit station progression
9:15	Develop a PWR! Circuit Station (~10 - stations) Have 3-4 variations (Assign equipment/PWR!Move, Participation – Partners)
9:50	BREAK
10:00	PWR!Circuit - Master class #1 – Participation with PWP Take turns instructing your station during the class Additional Progressions (complexity, evolutions, partner format, pole walking)
11:30	Equipment Practicum
12:00	LUNCH PROVIDED
1:00	Highlights of PWR!Moves Circuit Demo Class – Class description/templates Review E4BC Chart and implementation/Adaptations
1:30	Teaching tips Getting Started - Screening/Class Criteria/Equipment/technology/volunteers/technology
2:15	Exercise4Brain Change Essentials Review/Barriers <ul style="list-style-type: none"> • Increasing Everyday Activity - Integrating Basic4 PWR!Moves into lifestyle, home exercise programs, community activities (pole walking, boxing, Tennis, Hiking, Yoga, Dance) • Empowerment/Reducing Stress - Importance of social support (breathing, mediation, education....) and counseling and education
2:45	Becoming part of a PWR! Exercise Expert Network – Therapy/Community <ul style="list-style-type: none"> • PWR!Gym -Tucson • Connecting with medical/rehab professionals and local PD foundations • Use of logos/Marketing/Class descriptions/Credentials
3:00	End of Day 2 – THE END! Feedback/Certificates/Network Sign-In Forms

Faculty:

Becky G. Farley, PhD, MS, PT

Dr. Farley 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 has over 30 years of experience in neurological rehabilitation, and is currently the CEO/Founder of the nonprofit **Parkinson Wellness Recovery | PWR!** and a Physiology Associate at the University of Arizona. During her post-doc, Dr. Farley studied bradykinesia, developed the LSVT® BIG exercise program, and completed an NIH funded randomized clinical trial documenting its' short-term efficacy (3-months).

Dr. Farley is now training clinicians and fitness professionals to be PD-exercise experts to ensure the foundations of large amplitude **FUN**ctional training and other essential research-components are implemented into a comprehensive PD-specific exercise and integrated throughout the Parkinson's community. She is advocating that local PD-exercise experts join forces to allow people with PD to have access to comprehensive neuroplasticity-principled exercise programming for life, beginning at diagnosis. This is the type of paradigm shift that is necessary to truly slow disease progression. On February 2012, the doors to the first **PWR!Gym®**, a Model Community Neuro Fitness Center for people with Parkinson disease, were opened in Tucson, AZ to truly implement **Exercise AS Medicine**.

Jennifer Bazan-Wigle, PT/DPT

Dr. Jennifer Bazan-Wigle began her first career with a Bachelor's of Science in Education from Northern Arizona University teaching science for the Department of Defense Schools in the Netherlands, South Korea, Japan, and Germany and for the Miami-Dade School District in Miami, FL. In 2010, Jennifer graduated with a Doctor of Physical Therapy from Nova Southeastern University in Ft. Lauderdale, FL. Her primary area of physical therapy practice has focused on neurological rehabilitation. She is currently the Lead **PWR!** Gym Physical Therapist and participates in research, community presentations and continuing education courses as part of the **PWR!** Faculty.

Claire McLean, DPT, NCS

Dr. Claire McLean is a Board Certified Neurologic Clinical Specialist. She graduated with a doctorate in physical therapy from the University of Southern California and has specialty training through the University of Southern California/Rancho Los Amigos Neurologic Physical Therapy Residency program.

At Hoag Hospital, an NPF Care Center, Dr. McLean works in the outpatient rehabilitation clinic primarily with clients with neurologic dysfunction with an emphasis on Parkinson's disease and other movement disorders. She is on an interdisciplinary assessment and intervention team for patients prior to, and after receiving DBS surgery. Dr. McLean also coordinates and instructs multiple community exercise classes for individuals with PD following physical therapy.

Dr. McLean also is an Adjunct Faculty member instructing in USC's entry-level doctorate program. She has instructed in continuing education courses on the topics of self-efficacy and executive function training for patients with neurologic dysfunction as well as for the LSVT®BIG program. Dr. McLean has research experience working as an intervention therapist on the LEAPS (Locomotor Experience Applied Post-Stroke) trial, and on multiple studies investigating the effect of exercise in people with Parkinson disease. She was the primary blinded evaluator for the California sites of the ICARE (Interdisciplinary Comprehensive Arm Rehabilitation Evaluation) trial.

References:

1. Ahlskog JE. Does vigorous exercise have a neuro protective effect in Parkinson disease? *Neurology* 2011;77:288-295.
2. 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. *Exp Brain Res* 2005;167(3):462-467
3. Farley BG, Fox CM, Ramig LO, McFarland, D. Intensive amplitude-specific therapeutic approaches for Parkinson disease: Toward a neuroplasticity-principled rehabilitation model. *Top Geriatr Rehabil* 2008;24(2):99-114.
4. Farley BG. Developing Parkinson'-specific exercise programs. *J Active Aging*, 2004;Sept/Oct:22.
5. Farley BG. 2014. **PWR! Moves[®]. Make FUNction Exercise! A PWR! Guide to a Parkinson-Specific Home Exercise Program.** Tucson, AZ: Wheatmark.
6. Hirsch MA, Farley BG. Exercise and Neuroplasticity in Persons Living with Parkinson's Disease. *Eur J Phys Rehabil Med* 2009;45:215-229.
7. Kleim, JA, Jones TA. Principles of experience-dependent neural plasticity: implications for rehabilitation after brain damage. *J Speech Lang Hear Res* 2008;51(1):S225-S239.
8. Nieuwboer A, Rochester L, Muncks L, Swinnen SP. Motor learning in Parkinson's disease: limitations and potential for rehabilitation. *Parkinsonism Rel Disord* 2009;1553:S53-S58
9. Petzinger GM, Fisher BE, McEwen S, Beeler JA, Walsh JP, Jakowec M. Exercise-enhanced neuroplasticity targeting motor and cognitive circuitry in Parkinson's disease. *Lancet* 2013;12:716-726.
10. Petzinger GM, Fisher BE, Van Leeuwen JE, Vukovic M, Akopian G, Meshul CK, Holschneider DP, Nacca A, Walsh JP, Jakowec MW. Enhancing neuroplasticity in the basal ganglia. The role of exercise in Parkinson's disease. *Mov Disord* 2010;26(Suppl 1):S141-S145.
11. Ridgel AL, Vitek JL, Alberts JL. Forced, not voluntary, exercise improves motor function in Parkinson's disease patients. *Neurorehabil Neural Repair* 2009;23(6):600-608.
12. Zigmund MJ, Cameron JL, Hoffer BJ, Smeyne RJ. Neurorestoration by physical exercise: moving forward. *Parkinsonism Relat Disord* 2012 Jan;18 Suppl 1:S147-50.
13. Ratey, J. 2008. *SPARK: The Revolutionary New Science of Exercise and the Brain.* New York: Little, Brown.
14. Seligman, M. 1998. *Learned Optimism: How to Change Your Mind and Your Life.* New York, NY: Vintage.