PWR! Parkinson Wellness Recovery

PWR! Therapist Workshop

Translating Research into Exercise4BrainChange® Approaches for individuals with Parkinson disease.

Real World Rehabilitation and Community Implications

Allied Services Integrated Health System

Date

August 26-27, 2017

Location

Allied Services/Heinz Rehab
150 Mundy St. MACIII
Wilkes-Barre Township, PA 18702

PWR! Certified Therapist

Target Audience Required for Certification

Physical/Occupational Therapists, Physical/Occupational Therapist Assistants
(Limited spots available for students enrolled in a Master or Doctoral Program)

Approved for 14 contact hours/1.4 CEU's:

Arizona Physical Therapy Association (16-0707)
Arkansas State Board of Physical Therapy
California Physical Therapy Association (CPTA #16-299)
Florida Physical Therapy Association (20-459054)
Maryland Board of Physical Therapy Examiners
American Physical Therapy Association of Massachusetts (MA-15-11-4)
Minnesota Board of Physical Therapy (#9045)
Montana Chapter of the American Physical Therapy Association
New Jersey Board of Physical Therapy (2016-065)
Ohio Physical Therapy Association (16S0461)
South Carolina Physical Therapy Association (12-09-14-01)
Texas Physical Therapy Association (62192TX)
Wisconsin Physical Therapy Association (WPTA # 16496)

Approved for 15 contact hours/1.5 CEU's:

Kentucky Physical Therapy Association (#94-IPKTA-14)
Pennsylvania State Board of Physical Therapy (#PTCE007954)

Registration Fees

$550 per person
$300 Graduate Student Fee (CANNOT be combined with any group discounts)
Group Discounts: $500 per person for 2-4; $475 per person for 5+
$50 Late Fee (if registering after registration deadline – check availability)

Implementing Exercise4BrainChange® NOW
Join the PARKINSON EXERCISE REVOLUTION!
Give People PWR! over their Parkinson disease!

For more information call Vanessa at 520-591-5346
To register visit www.pwr4life.org

Parkinson Wellness Recovery
3849 E. Broadway Blvd. #163
Tucson, AZ 85716

www.pwr4life.org
T: 520.591.5346 • F: 888.780.0154

PWR! Parkinson Wellness Recovery

PWR! Therapist Workshop

PWR!Therapist Course Description:

Recent advances in basic and clinical science research suggest exercise and learning approaches may protect, repair, and optimize function in persons with Parkinson disease (PD).[1-12] To be effective, proactive rehabilitation paradigms are needed that deliver ongoing programming for life, starting at diagnosis, and that are guided by the essential principles of learning and neuroplasticity.[12] Participants will be introduced to a comprehensive research-based framework called Exercise4BrainChange® to guide clinicians in HOW to implement essential principles of learning and neuroplasticity identified in the literature to real world practice NOW. For each construct, techniques will be described that advocate forced use, progressive difficulty, reinforcement, active engagement, empowerment, attention to action, sensory awareness training, and neural readiness (aerobic conditioning/mental imagery). Each of these constructs is founded upon research in the fields of exercise science, motor control, and motor learning. This framework will be integrated with an understanding of the pathophysiology of Parkinson's disease for greater specificity of training.

PWR!*Moves*® are building blocks for everyday movement and involve the performance of whole body large amplitude "big" movements in multiple postures (prone/supine/all 4's/sitting/standing). The Basic 4 | **PWR!***Moves*® (UP/ROCK/TWIST/STEP) are taught as essential FUNctional exercises to target the primary symptoms of PD (bradykinesia/rigidity/incoordination). They provide the repetition and specificity of training for people with PD and can be scaled up/down across disease severity, integrated into function/ADL/lifestyle, implemented across disciplines (OT/PT/SPL) and settings (therapy/community), and reinforced in other research exercise programming (treadmill, cycling, pole walking, yoga, boxing, dance, Tai Chi). Exercise4BrainChange® framework applied to **PWR!***Moves*® allows for a comprehensive PD-specific approach that can target the multiple motor/sensory/cognitive/emotional symptoms of PD.

Participants will have the opportunity to practice **PWR!***Moves*® incorporating E4BC® techniques while getting feedback from **PWR!** Faculty. They will also watch live demos of **PWR!***Moves*® progressions and treatment with volunteers with PD working with **PWR!** Faculty. Video cases and an interactive format will be used to discuss treatment plan essentials, to introduce specific exercises and various progressions, and to illustrate the real world implementation of this framework across disease severity. Participants will be able to develop comprehensive neuroplasticity-principled PD-specific treatment plans that take into account other evidenced-based approaches, disease severity, symptoms, co-morbidities, preferred forms of exercise and activity, capacity for learning, and age.

The clinical translation of neuroplasticity-principled approaches for people with PD is dependent upon overcoming many challenges. Environments for learning are needed that embrace an atmosphere of empowerment, motivation, social enrichment, and FUNction! Regional networks of **PWR!** exercise experts are needed to advocate for early assessment and intervention, ongoing exercise, enrichment, and coordination with existing community fitness resources and local Parkinson foundations. We will describe how a Model Community NeuroFitness Center for people with Parkinson disease may offer a potential solution through partnerships with healthcare systems, Parkinson Foundations and through the training of local networks of **PWR!** PD exercise experts.

Parkinson Wellness Recovery
3849 E. Broadway Blvd. #163
Tucson, AZ 85716

www.pwr4life.org
T: 520.591.5346 • F: 888.780.0154

PWR! Parkinson Wellness Recovery

PWR! Therapist Workshop

Objectives/Goals:

1. Discuss recent advances in Parkinson disease etiology, pathophysiology, and diagnostic criteria.
2. Recognize motor and non-motor symptoms and how the interfere with function and present barriers to participation.
3. Summarize recent advances in basic and clinical neuroscience that have brought exercise (aerobics and skill acquisition) to the forefront in PD as it relates to *optimal brain function and skill acquisition*.
4. Explain the significance of targeting the training of amplitude into function (**PWR!***Moves*®) as the foundation for a comprehensive PD-specific program.
5. Perform the Basic 4 | **PWR!***Moves*® in 5 positions: floor prone/supine, all4's, sitting, standing and explain how they target foundational skills that become impaired in people with PD and how that interferes with function.
6. Vary the goal of how the Basic 4 | **PWR!***Moves*® are instructed and explain how that may differentially target multiple symptoms of PD (rigidity, bradykinesia, incoordination, automaticity).
7. Describe how working on each of the Basic 4 | **PWR!***Moves*® provides a PD-specific approach to targeting general fitness problems related to flexibility, strength, coordination, balance, and posture.
8. Demonstrate how **PWR!** Boosts can be a stand-alone program or integrated into **PWR!***Moves*® exercises and discuss why they are important for PWP.
9. Demonstrate effective use of modeling, mental imagery, attentional focus, external cues, instruction, reward-based and task-specific feedback to achieve optimal engagement for optimal performance and learning.
10. Explain the significance of implementing **PWR!***Moves*® as a foundation for PD-specific exercise across settings (therapy/community) that can be a stand-alone program, or integrated into task-specific training or other research-based community exercise programming (treadmill, cycling, pole walking, yoga, boxing, dance, Tai Chi).
11. Develop a comprehensive treatment plan for individuals with different disease severity using video case studies that is consistent with **PWR!**4LIFE essentials and the European Guidelines.
12. Implement **PWR!***Moves*® exercise progressions using video cases to illustrate real world implementation of Exercises4BrainChange® framework across disease severity.
13. Discuss the unmet needs in PD rehabilitation and possible solutions to their resolution through novel paradigms and community partnerships.

Parkinson Wellness Recovery
3849 E. Broadway Blvd. #163
Tucson, AZ 85716

www.pwr4life.org
T: 520.591.5346 • F: 888.780.0154

PWR! Parkinson Wellness Recovery

PWR! Therapist Workshop

Translating Research into Exercise4BrainChange™ Approaches for Individuals with Parkinson Disease: Real World Rehabilitation and Community Implications

PWR! THERAPIST WORKSHOP SCHEDULE - DAY 1

7:30 am	Registration
8:00 am	Rationale for **PWR!4LIFE** Exercise4BrainChange® Model • What you do? How you Practice.
9:30	Overview of Parkinson disease (PD)
10:45	BREAK
11:00	Basic 4 | **PWR!***Moves*® Rationale/Essentials
11:30	Basic4 | **PWR!***Moves* - GROUP PRACTICUM • Basic4 | **PWR!***Moves* Standing Essentials • Boosts integrated/alone
12:30 pm	LUNCH (on your own)
1:30	**Basic4 | PWR!*Moves* Demo with PWP** • **prepare/activate/flow/boosts**
2:30	Basic4 | **PWR!***Moves* GROUP PRACTICUM • Basic 4 | **PWR!***Moves*/5 positions • Prepare/Activate/FLOW/Boosts/Adaptations
3:30	BREAK
3:45	Basic4 | **PWR!***Moves* - GROUP PRACTICUM • **PWR!** Walking - Evolution Flows - Variations • Simple equipment to enhance quality of movement/success
4:30	Basic4 | **PWR!***Moves* - PARTNER PRACTICUM • Task-Specific/Functional application demo • Integrate **PWR!***Moves* into an assigned Task-specific/Functional Activity
5:00	Basic4 | **PWR!***Moves* - PARTNER PRACTICUM • Task-specific applications/Discussions
6:00 pm	End of Day 1

PWR! THERAPIST WORKSHOP SCHEDULE - DAY 2

8:00 am	Evidence for Learning in PD? How to optimize learning in PD?
9:30	**BREAK**
9:45 am	**Demo for PWP –Personalized PWR! E4BC Program** • **Exercise/Task-specific/Functional PWR!*Moves* Progressions** • **Equipment and E4BC Principles to enhance learning**
11:15	Basic4 | **PWR!** MOVES GROUP EQUIPMENT PRACTICUM
11:45	**LUNCH (on your own)**
12:30 pm	**PWR!** E4BC Program Discussion • Sample video cases/HEP plans/assessment
1:30	CONT. Evidence for Learning in PD? How to optimize learning in PD?
2:00	Implications for our healthcare delivery paradigm
3:15 pm	End of Day 2 – THE END! Course Feedback Forms/Certificates of completion and Database forms

Parkinson Wellness Recovery
3849 E. Broadway Blvd. #163
Tucson, AZ 85716

www.pwr4life.org
T: 520.591.5346 • F: 888.780.0154

PWR! Parkinson Wellness Recovery

PWR! Therapist Workshop

Course: Translating Research into Exercise4BrainChange® Approaches for Individuals with Parkinson disease.

REGISTRATION INFORMATION

Registration will not be processed without FULL payment. You are not officially registered until receipt of confirmation letter for the course. One week prior to the course, only internet registrations and faxed registration forms will be accepted. Late fee will apply at that time. Slots are granted on a first come, first serve basis, if registering late, please check availability.

Workshop: August 26-27, 2017
Location: Allied Services/Heinz Rehab 150 Mundy St. MACIII Wilkes-Barre Township, PA 18702
Registration Deadline: August 19, 2017

CANCELLATION POLICY

IF PARTICIPANT CANCELS:

With written or phone notification of cancellation, tuition will be refunded minus the following cancellation fees:

- 4 weeks prior to workshop date: $75.00
- 2 weeks prior to workshop date: $150.00
- Less than 2 weeks of workshop date: $300.00

IF PARKINSON WELLNESS RECOVERY CANCELS:

Full tuition will be refunded. PWR! is not responsible for the refund of travel or hotel expenses under any circumstances.

☐ Cancellation Policy Accepted
(Must be checked to complete processing)

Personal/Billing Information (If paying by credit card, please use your billing address)

First Name: _____

Last Name: _____

Home/Billing Address: _____

Home Phone: _____

Cell Phone: _____

Email: _____

Credit Card#: _____

Exp.: _____ **CVC#:** _____

Signature: _____

Registration Fees

- ☐ $550 Individual
- ☐ $500 Group Rate per person, 2-4 from the same facility
- ☐ $475 Group Rate per person, 5 or ☐ more from same facility
- ☐ $300 Graduate Student Rate

PLEASE LIST OR EMAIL US THE NAMES OF OTHER GROUP PARTICIPANTS

Mail this form to PWR! at: 3849 E. Broadway Blvd., STE#163, Tucson, AZ 85716
For questions contact Vanessa at 520-591-5346 or email vanessa@pwr4life.org

Registration and payment also available online at: www.pwr4life.org

Parkinson Wellness Recovery
3849 E. Broadway Blvd. #163
Tucson, AZ 85716

www.pwr4life.org
T: 520.591.5346 • F: 888.780.0154

PWR! Parkinson Wellness Recovery

PWR! Therapist Workshop

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 FUNctional 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.

Parkinson Wellness Recovery
3849 E. Broadway Blvd. #163
Tucson, AZ 85716

www.pwr4life.org
T: 520.591.5346 • F: 888.780.0154

References:

1. Ahlskog JE. Does vigorous exercise have a neuroprotective 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. Fisher BE, Auanzheng L, Nacca A, Salem GJ, Song J, Yip J, Hui JS, Jakowec MW, Petzinger GM. Treadmill exercise elevates striatal dopamine D2 receptor binding potential in patients with early Parkinson's disease. Neuroreport 2013;24:509-514.
5. Frazzitta G, Bertotti G, Riboldazzi G, Turla M, Uccellini D, Boveri N, et al. Effectiveness of intensive inpatient rehabilitation treatment on disease progression in parkinsonian patients: A randomized controlled trial with 1-year follow-up. Neurorehab Neural Repair 2012;26:144-150.
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. Rochester L, Baker K, Hetherington V, Jones D, Willems A, Kwakkel G, Van Wegen E, Lim I, Nieuwboer. Evidence for motor learning in Parkinson's disease: Acquisition, automaticity and retention of cued gait performance after training with external rhythmical cues. Brain Res 2010;1319:103-111.
13. Tabak R, Aquije G, Fisher B. Aerobic exercise to improve executive function in Parkinson disease: A case series. JNPT 2013;37:58-64.
14. Tomlinson CL, Patel S, et al. Physiotherapy versus placebo or no intervention in Parkinson's disease. Cochrane Database Syst Rev. 2012.
15. Zigmond MJ, Cameron JL, Hoffer BJ, Smeyne RJ. Neurorestoration by physical exercise: moving forward. Parkinsonism Relat Disord 2012 Jan;18 Suppl 1:S147-50.

Parkinson Wellness Recovery
3849 E. Broadway Blvd. #163
Tucson, AZ 85716

www.pwr4life.org
T: 520.591.5346 • F: 888.780.0154