

# PWR!Moves<sup>®</sup> Therapist Certification Workshop

**Date**  
December 5-6, 2020

**Location**  
Delivered via Zoom



## Eligible Participants

Physical Therapists, Physical Therapy Assistants, Occupational Therapists, Occupational Therapy Assistants

| Live Zoom workshops approved for 15 contact hours   | Live in-person workshops approved for 15 Contact Hours   |  |
|---|--|--|
| Arizona Physical Therapy Association<br>California Physical Therapy Association<br>North Carolina Board of Physical Therapy Examiners<br>Texas Physical Therapy Association<br>Physical Therapy Association of Washington | Arizona Physical Therapy Association (CEUL042667)<br>Arkansas State Board of Physical Therapy<br>California Physical Therapy Association (19-375)<br>Colorado Physical Therapy Association (CEUL021381)<br>Physical Therapy Association of Georgia<br>Kentucky Physical Therapy Association (85-18-KPTA)<br>American Physical Therapy Association of Massachusetts (MA-15-11-4)<br>Michigan Physical Therapy Association (CEUL042671)<br>Minnesota Board of Physical Therapy (9045)<br>Mississippi State Board of Physical Therapy<br>Montana Physical Therapy Association<br>Nebraska Physical Therapy Association<br>New Jersey State Board of Physical Therapy Examiners (2002-31)<br>New Mexico Occupational Therapy Board<br>New Mexico American Physical Therapy Association<br>Nevada State Board of Physical Therapy Examiners (NAC 640.450)<br>North Carolina Board of Occupational Therapy<br>North Carolina Board of Physical Therapy Examiners | North Dakota Physical Therapy Association<br>Ohio Physical Therapy Association (18S8487)<br>Ohio Occupational Therapy, Physical Therapy, and Athletic Trainers Board<br>Oklahoma State Board of Physical Therapy<br>Pennsylvania State Board of Physical Therapy<br>South Dakota Physical Therapy Association<br>South Dakota Occupational Therapy Association<br>Texas Occupational Therapy Association (438-01)<br>Texas Physical Therapy Association (71568TX)<br>Virginia Physical Therapy Association<br>Physical Therapy Association of Washington |
| <b>Live Zoom workshops approved for 17.5 contact hours</b>  | <b>Approved for 17.5 Contact Hours</b>   |  |
| Florida Board of Occupational Therapy<br>Florida Physical Therapy Association<br>South Carolina Physical Therapy Association<br>Wisconsin Physical Therapy Association  | Florida Board of Occupational Therapy (20-675971)<br>Florida Physical Therapy Association (20-875971)<br>South Carolina Physical Therapy Association (CEUL026150)<br>Wisconsin Physical Therapy Association (CEUL038477)   |  |

## Registration Fees

\$650 per person

\$625 per person for groups of 2-4

Additional discounts are available for graduate students and groups of 5 or more

Check out our website for Early Bird pricing!

For more information email us at [workshopsinfo@pwr4life.org](mailto:workshopsinfo@pwr4life.org), or to register online, click [here](#) to visit our therapist workshop registration page.

**Help people with Parkinson disease get better and stay better with exercise!**

## Course Description

Recent advances in basic and clinical science research suggest exercise and rehabilitation approaches may protect and repair dopamine circuitry, improve motor and non-motor symptoms, and delay motor deterioration in people with Parkinson disease (PD). Participants will be introduced to the **PWR!Moves**<sup>®</sup> curriculum, a PD-specific functional skill training curriculum guided by the essential principles of learning and neuroplasticity. **PWR!Moves** can be personalized, adapted across disease severity, and implemented in both therapy and group exercise settings. The **PWR!Moves** curriculum advocates for effective, proactive rehabilitation paradigms which start at diagnosis, offer ongoing programming for life, and integrate therapy and community exercise.

Central to the **PWR!Moves** curriculum is the training of amplitude directly into four building blocks of function. Each building block counteracts a primary motor control deficit shown by research to interfere with everyday functional mobility in people with Parkinson disease: antigravity extension, weight shifting, axial mobility, and transitions. These basic four building blocks are initially instructed in five positions: prone, supine, on all fours, sitting, and standing. Thus, PD-specific training is achieved by focusing on training amplitude and functional, whole-body movements. Additionally, therapists can personalize the curriculum to target specific PD symptoms including rigidity, bradykinesia, incoordination, and reduced self-awareness.

To familiarize themselves with the **PWR!Moves**, participants will rehearse the **PWR!Moves** with faculty in several interactive practicum sessions which integrate question and answer sessions throughout. Participants will also observe faculty apply Exercise4BrainChange (E4BC) techniques while instructing the **PWR!Moves** with each other and with volunteers with PD, in order to optimize volunteers' learning, allowing for increases in retention, generalization, and automaticity. E4BC techniques, informed by research, have been organized into categories that employ high physical effort, attentional focus, cognitive engagement, and emotional engagement. The repetition required to optimize learning is uniquely achieved by emphasizing functional building blocks first as exercise, and subsequently in combination with E4BC techniques to optimize functional mobility. This flexibility allows for therapists to reinforce goal-directed and habitual movements while also targeting personalized symptoms, functional mobility goals, posture, fall reduction, ADL, and quality of life concerns. To extend the benefits gained from therapy, therapists can also instruct **PWR!Moves** in a group format or refer people with PD to other **PWR!Moves** community group classes.

Live demonstrations, pre-recorded videos of practicum sessions with people with PD, video cases, and interactive instruction will be used to discuss practice essentials and treatment plans, as well as to illustrate the real-world implementation of this framework across disease severity levels. Participants will observe faculty problem-solving while working one-on-one with people with Parkinson's (PWP) and will practice **PWR!Moves** alongside faculty in interactive demonstrations throughout the workshop.

Upon completion, therapists will be able to instruct the **PWR!Moves** curriculum and develop PD-specific, neuroplasticity-principled, personalized treatment plans for individuals of varying disease severity. **PWR!Moves** are appropriate for any therapy setting and can be integrated into fitness, lifestyle, and community exercise programs for continuous access to PD-specific quality functional skill practice anywhere, anytime!

## Objectives and Goals

1. Discuss recent advances in Parkinson disease etiology, pathophysiology, and diagnostic criteria.
2. Recognize motor and non-motor symptoms and how they interfere with function and present barriers to participation.
3. Summarize recent advances in basic and clinical neuroscience that have brought exercise to the forefront in PD treatment as it relates to optimal brain function and skill acquisition.
4. Explain the significance of targeting the training of amplitude into function (**PWR!Moves**<sup>®</sup>) as the foundation for a comprehensive PD-specific program.
5. Perform the Basic 4 | **PWR!Moves**<sup>®</sup> in 5 positions: prone, supine, all 4's, sitting, standing.
6. Explain how the Basic 4 | **PWR!Moves**<sup>®</sup> target motor control skills that become impaired in people with PD and interfere with function.
7. Describe how the Basic 4 | **PWR!Moves**<sup>®</sup> may be personalized to differentially target multiple PD symptoms, including rigidity, bradykinesia, incoordination, and reduced self-awareness.
8. Explain how training each of the Basic 4 | **PWR!Moves**<sup>®</sup> provides a PD-specific means of targeting general fitness problems related to flexibility, strength, coordination, balance, and posture.
9. Effectively use **PWR!Moves**<sup>®</sup> Boosts with PWP as a stand-alone tool or as a component integrated into interventions along with other **PWR!Moves**<sup>®</sup> exercises.
10. Effectively implement Exercise4BrainChange techniques, including modeling, mental imagery, attention to action, external cues, instruction, and reward-based and task-specific feedback to achieve optimal performance and learning for your clients with Parkinson disease.
11. Explain the significance of the flexibility inherent in implementing the **PWR!Moves**<sup>®</sup> curriculum as a foundation for PD-specific, task-specific, and/or community exercise programming, focusing on its applicability to a variety of settings and its ability to be used alone, in conjunction with task-specific and/or community-based exercise programming, or delivered as a stand-alone exercise program for functional mobility.
12. Develop treatment plans which integrate **PWR!Moves**<sup>®</sup> and progressive aerobic training tailored to individuals with different disease severities.
13. Appropriately consider additional information such as motor and non-motor symptoms and environmental, personal, and psychosocial factors when developing exercise prescriptions that include both intensive bouts of therapy and community exercise in order to optimize and perpetuate functional mobility benefits.
14. Discuss the unmet needs in PD rehabilitation and possible solutions to their resolution through novel paradigms and community partnerships.

## PWR!Moves® Therapist Certification Workshop – Day 1

|          |   |
|----------|---|
| 7:30 am  | Registration  |
| 8:00 am  | Introduction<br>About <b>PWR!</b> and our vision for healthcare for PWP (people with PD)  |
| 8:30 am  | Hot topics in Parkinson disease (PD)<br>Review of basal ganglia circuits and symptoms   |
| 9:15 am  | Exercise as medicine: Indications   |
| 9:35 am  | Break   |
| 9:50 am  | Exercise as medicine: Practice essentials (progressive exercise and PD-specific)  |
| 10:35 am | Virtual Group Practicum – Basic 4   <b>PWR!Moves</b> <ul style="list-style-type: none"> <li>• Basic 4   <b>PWR!Moves</b> in prone, supine, all 4's, sitting, standing</li> <li>• Prepare, Activate, and Flow</li> <li>• Connect to symptoms (e.g., rigidity, bradykinesia, incoordination)</li> <li>• Connect to functional application</li> <li>• Integrate Boosts</li> <li>• Adaptations, simple equipment for cues, targets</li> </ul> |
| 12:45 pm | Lunch on your own   |
| 1:30 pm  | Faculty Demonstrations with PWP – Basic 4   <b>PWR!Moves</b> <ul style="list-style-type: none"> <li>• Live-streamed demonstrations and pre-recorded videos of faculty working with people with PD will be used to train Basic 4 <b>PWR!Moves</b> in all positions, using feedback, appropriate cues, and adaptations as needed</li> </ul>   |
| 2:30 pm  | Individual Case Presentation – Basic 4   <b>PWR!Moves</b> ® <ul style="list-style-type: none"> <li>• Participants will watch video cases of faculty teaching the <b>PWR!Moves</b> to people with PD whose symptoms present differently. Participants will propose solutions using feedback, instructional and other strategies, cues, motivation, and adaptations to elicit optimal performance from people with PD.</li> </ul>           |
| 4:00 pm  | Break   |
| 4:15 pm  | Virtual Group Practicum – Mobility and Functionality  |
| 6:00 pm  | End of Day 1  |

Note:

- Blue indicates practicum sessions with people with PD
- Schedule subject to change

## PWR!Moves® Therapist Certification Workshop – Day 2

|          |  |
|----------|--|
| 8:00 am  | <b>PWR! Pearls</b><br>Evidence for and how to optimize learning in PD  |
| 9:30 am  | Virtual Group Practicum -- Basic 4   <b>PWR!Moves</b> , Cognitive and Motor Challenges <ul style="list-style-type: none"> <li>• Review Basic 4   <b>PWR!Moves</b>, including Flows and Boosts</li> <li>• Add variation ideas in each position</li> <li>• Review Basic 4   <b>PWR!Moves</b> transitions (evolutions)</li> <li>• Introduce standalone or advanced boosts</li> <li>• Create task-specific and functional progressions</li> <li>• Overview practicum equipment stations to enhance learning</li> </ul> |
| 10:45 am | Break  |
| 11:00 am | Faculty Demonstrations with PWP – Task-specific Progressions <ul style="list-style-type: none"> <li>• Integrate <b>PWR!Moves</b> into rehab through exercise and task-specific progressions (e.g., gait, agility, balance, stepping, turning, fall prevention, bed mobility, posture, strength, function, dexterity, sports, lifestyle, eye boosts)</li> <li>• Apply Exercise4BrainChange® principles</li> <li>• Use equipment to enhance learning—assist, guide, challenge, and empower</li> </ul>                |
| 12:30 pm | Lunch on your own  |
| 1:30 pm  | Video Case Discussion – Implementing <b>PWR!Moves</b> Rehab Programs <ul style="list-style-type: none"> <li>• Propose plans of care for video cases presented throughout the workshop</li> <li>• Refer to symptoms and principles tables</li> </ul>  |
| 2:45 pm  | Barriers to Exercise as Medicine and Implications for Healthcare   |
| 3:10 pm  | <b>PWR!Moves</b> Certified Professionals and you!<br>Building your local <b>PWR!Moves</b> networks, from rehab to community and back!  |
| 3:30 pm  | End of Day 2   |

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- Blue indicates practicum sessions with people with PD
- Schedule subject to change



## NeuroFit Faculty



**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<sup>®</sup>, 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<sup>®</sup>**

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.



**Claire McLean, PT, DPT,  
Board Certified Neurologic Clinical Specialist**

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<sup>®</sup>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.



**Maria Allen, PT**

Maria has over 35 years of experience as a physical therapist treating people with neurological disorders, primarily severe brain injury, stroke, and vestibular dysfunction. She began to focus on working with the Parkinson's population in 2011. After earning her LSVT BIG certification, she became a **PWR!Moves** Certified Therapist in 2013 and **PWR!Moves** Certified Instructor in 2014. She began attending Parkinson disease related conferences, including Allied Team Training for Parkinson's (ATTP) in 2014, the 19th International Congress of Parkinson's Disease and Movement Disorders in 2015, and the World Parkinson Congress in 2016. She had the privilege of volunteering at the **PWR!** Retreat in both 2015 and 2016. She developed and currently serves as Coordinator of a

multidisciplinary Parkinson Wellness Program for a home health company serving the Central Coast area of California, which now serves over 260 PWP each year. She recently earned her Certificate of Advanced Competency in Home Health. She has been assisting with **PWR!Moves** Therapist and Instructor Training and Certification Workshops since 2016. As a Home Health Consultant for **PWR!**, she has been instrumental in the development and teaching of our home health-focused **PWR!Moves** Therapist Training and Certification Workshops across the country. In March 2019, she joined the NeuroFit faculty to teach **PWR!Moves** Therapist Workshops with more regularity. While not traveling the US teaching, Maria works closely with her local Parkinson Disease community and serves as the Board Advisor and Education Chair for the Central Coast Parkinson Association and as an Advisor for a group of Cal Poly, San Luis Obispo students-turned-entrepreneurs who are developing a new device for freezing of gait.



**Lori Dodd, PT**

Lori earned her undergraduate degree at the University of Iowa in 1985. She attended Chicago Medical School in North Chicago, now named Rosalind Franklin University of Medicine and Science. She graduated with her bachelor's degree in physical therapy in 1987. She became a **PWR!Moves** Certified Therapist in 2016, a **PWR!Moves** Certified Instructor in 2017, and a Rock Steady Boxing affiliate and coach in 2018. Now, after nearly 32 years of practicing in a variety of settings, she works in the home healthcare field, offering wellness classes to people with Parkinson disease through her private practice, Power Over Parkinson's (POP) Fitness.



**Kristina Dorkoski, PT, DPT, CEEAA®,  
Board Certified Neurologic Clinical Specialist**

Dr. Kristina Dorkoski is an outpatient physical therapist, Board Certified Neurologic Specialist, Certified Exercise Expert for Aging Adults, Professional Yoga Therapist, and certified Pilates instructor. She enjoys coupling integrative care with the latest evidence and technology in neurologic rehab. Her varied experience also includes the treatment of medically complex geriatrics, vestibular disorders, chronic pain conditions, and acute care and trauma patients. Dr. Dorkoski earned her BS in health science and MS in physical therapy from Misericordia University, and doctorate in physical therapy from Temple University. She is an LSVT BIG® and **PWR!Moves**® Certified Therapist. Dr. Dorkoski is an

adjunct faculty member at Misericordia University, where she instructs neuromuscular labs and a special practices course on the use of Pilates and Medical Therapeutic Yoga® in rehabilitation. Additionally, Dr. Dorkoski serves as an adjunct faculty member at Professional Yoga Therapy Institute®.



**Jamie Haines, PT, DScPT  
Board Certified Neurologic Clinical Specialist**

Dr. Haines is an Assistant Professor in the Doctoral Program in Physical Therapy at Central Michigan University. She received her Master of Science in Physical Therapy from the Grand Valley State University in 1995 and earned her DScPT from Oakland University in 2014. She is a Board Certified Neurologic Specialist through the American Board of Physical Therapy Specialties, certified in 2005 and recertified in 2015. She is a **PWR!Moves** Certified Therapist and teaches community exercises classes for people with Parkinson disease. She is a member of the American Physical Therapy Association, currently serving as Vice Chair of the Stroke SIG in the Academy of Neurologic PT.



**Melanie Lomaglio, PT, DPT, MSc**  
**Board Certified Neurologic Clinical Specialist**

Dr. Melanie Lomaglio brings 20 years of experience to her patients at STARS Rehab and demonstrates a commitment to lifelong learning in order to provide the most up-to-date, evidenced-based care for her patients. She graduated from McGill University in 1997 with a Bachelor of Science in Physical Therapy, the University of British Columbia in 2005 with a Master of Science in Neurological Rehab, and completed her Doctor of Physical Therapy degree from the University of St. Augustine in 2017. In 2009 she and her husband founded STARS Rehab in St. Augustine, Florida. In 2010, Melanie joined an elite class of clinicians when she became a Board Certified Neurologic Clinical Specialist and was recertified in 2019. Dr. Lomaglio also has 12 years of teaching experience as an Assistant Professor in an entry-level doctoral of Physical Therapy program, participates in research, and has published and presented her work in the US and internationally. Her passion at STARS Rehab is to improve the quality of life of people living with Parkinson disease. In addition to providing individual and group wellness care, she facilitates the St. Augustine Parkinson's disease support group, which offers patients and caregivers free year-round educational resources and social support via monthly meetings and partnerships with local healthcare providers.



**Dana Lykins, PT, DPT**

Dana Lykins received her Master of Physical Therapy and Doctor of Physical Therapy degrees from the University of Kentucky in 1999 and 2008. Dana developed her love of neuro rehab shortly after finishing PT school and has continued to practice in the outpatient neuro therapy setting for much of her 20-year career. Dana developed outpatient neuro therapy programs at two health care systems in central Kentucky to help meet the needs of the neuro population in the area. Having grown up in eastern Kentucky, Dana recognizes the need for improved medical care in rural areas, especially as it relates to neuro therapy, and is a strong advocate for better access to specialized care throughout the state. Dana is passionate about sharing her love of neuro with others, serving as adjunct faculty for UK's Physical Therapy program, participating in community presentations, clinical research, and teaching **PWR!Moves** Therapist Training and Certification Workshops in Kentucky and across the US.

## References

1. Ahlskog JE. Does vigorous exercise have a neuroprotective effect in Parkinson disease? *Neurology* 2011;77:288-294.
2. Bouca-Machado R, Maetzler W, Ferreira JJ. What is functional mobility applied to Parkinson's disease. *J Parkinson Disease* 2018;8:121-130.
3. Cascaes da Silva F, Iop Rda R, Domingos dos Santos P, Aguiar Bezerra de Melo LM, Barbosa Gutierrez Filho PJ, da Silva R. 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.
4. Duchesne C, Gheysen F, Bore A, Albouy G, Nadeau A, et al. Influence of aerobic exercise training on the neural correlates of motor learning in Parkinson's disease individuals. *NeuroImage Clin* 2016;12:559-569.
5. Duchesne C, Lungu O, Nadeau A, Robillard ME, Bore 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.
6. 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.
7. 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.
8. 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.
9. Frazzitta G, Maestri R, Bertotti G, Riboldazzi G, Boveri N, Perini M, Uccellini D, Turla M, Comi C, Pezzoli G, Ghilardi MF. Intensive rehabilitation treatment in early Parkinson's disease: A randomized pilot study with a 2-year follow-up. *Neurorehab Neural Repair* 2015;29(2):123-131.
10. Hirsch MA, Farley BG. Exercise and Neuroplasticity in Persons Living with Parkinson's Disease. *Eur J Phys Rehabil Med* 2009;45:215-229.
11. Abbruzzese G, Marchese R, Avanzino L, Pelosin E. Rehabilitation for Parkinson's disease: Current outlook and future challenges. *Parkinsonism Related Disord* 2016;22:S60-S64.
12. Gretchen O, Reynolds MA, Otto MW, Ellis TD, Cronin-Golomb A. The therapeutic potential of exercise to improve mood, cognition, and sleep in Parkinson's disease. *Mov Disord* 2016;31(1):23-38.
13. 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.
14. Marinelli L, Quartarone A, Hallett M, Frazzitta G, Ghilardi MF. The many facets of motor learning and their relevance for Parkinson's disease. *Clin Neurophysiol* 2017;128:1127-1141.
15. 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.
16. Schenkman M, Moor CG, Kohrt WM, Hall DA, Delitto A, Comella CL, et al. Effect of high-intensity treadmill exercise on motor symptoms in patients with De Novo Parkinson disease. A phase 2 randomized clinical trial. *JAMA Neurology* 2018 Feb 1;75(2):219-226.
17. Lee YY, Fisher BE. Use of low-frequency repetitive transcranial magnetic stimulation to reduce context-dependent learning in people with Parkinson's disease. *Eur J Phys Rehabil Med* 2018 Aug;54(4):560-567.