

# PEP NEWS

NOVEMBER 2022 Barbara Marquardt, Editor, M.Ed., MCHES, WCP, RYT

NOVEMBER MEETING—Wednesday, November 2, 2022 – 2:15 p.m.

**W**e are pleased to have **Anne Reed, Board Certified Music Therapist and Interim Chair from The Music Settlement** join us to talk about Music Therapy and Parkinson's. Music therapy is an established health profession that uses clinical and evidence-based music interventions to address physical, emotional, cognitive, and social needs of individuals. Aside from Anne's administrative responsibilities, she conducts individual music therapy sessions with children and adults having multiple disabilities. Anne has co-authored articles in the *Journal of Music Therapy* and other journals. Anne has presented at regional and national music therapy conferences, an international conference on conflict resolution at Cuyahoga Community College, and for the Adoption Network of Greater Cleveland.

Cleveland Heights Senior Activity Center/One Monticello Blvd., Cleveland Heights, OH 44118

Last names A through M, please bring **individually wrapped snacks**. S.A.C. policy prohibits serving food "buffet style"; everything must be individually packaged. Thanks so much!

## From David Brandt

Oftentimes when we think of battling the effects of Parkinson's, we concentrate on the new drugs available to keep us in our "on periods" or help with our tremors, etc. or maybe deep brain stimulation, or maybe changing our diet. These are all wonderful options that can assist us in our daily lives and make things better and more tolerable.

The next couple of months, we will be exposed to some of the options that a lot of us would consider fun. First, at our meeting in November (11/2), we will have Ann Reed from The Music Settlement, talk to us and show us how music and music therapy can help those with Parkinson's. That is followed quickly by the Big Band Brunch (11/6) which expands on the fun music approach and can also include the joy of dancing. Finally, at our December meeting (12/7), we will have Char Grossman from YogaReach explain how yoga can be so helpful to those with Parkinson's. It will be a fun couple of months that will take us through the upcoming holiday season!

Speaking of the Big Band Brunch, don't forget that *PEP* will cover the \$20 cost per person of you and your partner to attend this wonderful event. To do so, just email me at [dbrandtpep@gmail.com](mailto:dbrandtpep@gmail.com) or call me at

440-742-0153 to let me know. I ask that you do so by October 29<sup>th</sup>. See the details below of the event.

## Upcoming Events

**October 29 Parkinson's Boot Camp** – This annual event put on by University Hospitals will be held at LaCentre Conference and Banquet facility in Westlake from 9:30 a.m. – 3 p.m. Doors open at 8 a.m. for registration. A light breakfast and lunch will be provided and there is no charge for the event. Scheduled speakers include Camila Kilbane, MD and Director of the Parkinson's & Movements Disorders Center at University Hospitals; Cynthia Comella, MD and Professor Emeritus at Rush University Medical Center (Keynote speaker); and Angela Ridgel, PhD and Professor Exercise Science at Kent State University. To register, please call 216-983-6683.

**November 6 Big Band Brunch Sponsored by Ohio Parkinson Region Northeast Region (OPFNE)** at Driftwood Caterers at Landerhaven, 6111 Landerhaven Dr., Mayfield Hts., OH – At Noon for a fabulous buffet brunch and 1-3 p.m. will feature the Swing City Band. You can register online at [ohparkinson.org](http://ohparkinson.org). Tickets are \$20 per person.

### Parkinson's Disease Question Corner

Email: [barbaramarquardt@outlook.com](mailto:barbaramarquardt@outlook.com)

**Question:** What is THINK?

**Answer:** The THINK patented brain training system was developed through collaborative efforts among the world's top laboratories, hospitals, and universities. Industry partners include scientists and representatives from top international institutions, such as: Columbia University, New York University Langone Medical Center, Mount Sinai Hospital, Pitie-Salpetriere Hospital in Paris, and Sapienza University in Rome. THINK's beneficial results are scientifically validated, and all claims are peer reviewed.

The brain training system employs a state-of-the-art brain to computer interface, which is non-invasive, neuroscience-based, frequency specific neuromodulator, which is unlike any other device or system. Device is created in collaboration with HoneyBee Robotics, a NASA affiliate, and has been validated by correlated, double-blind sham-proof randomized clinical studies. The THINK system generates new neuronal pathways in the brain, strengthening the areas responsible for attention, executive function, organization and planning.

#### **WHAT IS THINK?**

- THINK is the patented, non-invasive, and scientifically validated neuro-game, developed with scientists from premier international hospitals and universities, which sustainably boosts dopamine production.
- THINK increases attention, focus, resilience, and speed of thought.
- THINK decreases stress, making you more effective, efficient, and happy.
- THINK is fun, relaxing, and only requires 5 one-hour sessions to achieve immediate and long-lasting results.

#### **WHAT TO EXPECT FROM A SESSION**

You will sit comfortably and wear the lightweight THINK head-band, which you will use to interface with our neuro-game. The session is relaxing, fun, effective and efficient, while also lasting only one hour, providing an immediate boost to your day. To achieve lasting results, THINK is done in a series of 5 sessions, ideally consecutively.

#### **EFFECTS:**

Initially, at least one of the following: sharpened focus, improved relaxation, or uplifted mood. Subsequently, brain will begin creating new, more efficient, pathways, improving neuroplasticity. Furthermore, users report increased clarity and work efficiency, overall strong performance. Finally, at least two of the following: rerouted executive pathways and significant increases in mental resilience, speed of processing, cognitive efficacy, and academic performance. Some clients experience reduction of pain, increased mobility, and better sports performance.

For more information, please visit their website at <https://www.thinkinterfaces.com>

Ref: <https://www.thinkinterfaces.com>

## **Could Climbing Help People with PD Reach New Heights?**

*(Excerpt from parkinsonslife.eu)*

*Researchers in Vienna, Austria, have found that sport climbing may help people with Parkinson's to "significantly" improve their posture*

**E**ver thought of climbing for fun? According to experts, the benefits of the sport can be wide-ranging – with the potential to improve cardiorespiratory fitness, strength, balance and flexibility. Now, a new study has suggested that climbing may also offer "significant" positive effects on posture in people with mild to moderate Parkinson's.

Because the condition affects control of automatic activities – such as reminders sent from the brain to stand up straight – people with Parkinson's may have stooped posture. To find out whether climbing could help tackle this symptom, researchers in Vienna, Austria, conducted a 12-week study involving 46 people with the condition.

Among these participants, one group took part in sport climbing while a control group carried out a different, unsupervised exercise of their choice. Throughout the study period, members of the climbing group – who had no prior experience with the sport – conducted 90 minutes of supervised rope climbing per week.

After three months, all participants were measured in terms of forward flexion (bending) of the spine.

### **"There's no burden you can't conquer"**

The results, which were presented at this year's International Congress of Parkinson's Disease and Movement Disorders in Madrid, Spain, revealed that those who practiced climbing throughout the study period saw improvements in their back posture.

Based on the findings, the study authors concluded that sport climbing "significantly improves posture in mild to moderate Parkinson's disease".

*(cont'd on last page)*

## Testing CBD in Parkinson's Worms

(Excerpt from parkinsonsnewstoday.com)

In this study, researchers in China used a number of tests to evaluate the effect of CBD treatment in *Caenorhabditis elegans*, a type of nematode worm that is well-characterized as a laboratory model.

First, the researchers tested various concentrations of CBD in healthy worms, with doses ranging from 0.025 to 0.4 micromolar (mM). Results showed that doses of 0.2 mM or higher were toxic to the worms, so for subsequent experiments, the team used three non-toxic doses: 0.025, 0.05, and 0.1 mM. The scientists then tested these CBD concentrations in worms with modeled Parkinson's, induced via 6-OHDA. Parkinson's is caused by the death of dopamine-producing cells in the brain; 6-OHDA is a chemical that is toxic for these cells.

The *C. elegans* model used in this study was genetically engineered to express fluorescent proteins in dopamine-making neurons. That allowed the scientists to easily detect these disease-relevant cells.

6-OHDA substantially reduced the fluorescent signal in these worms, indicating a reduction in numbers of dopaminergic neurons. Treatment with CBD at concentrations of 0.025, 0.05, and 0.1 mM increased this fluorescent signal by 24.66%, 52.41%, and 71.36%, respectively, suggesting that CBD prevented dopaminergic nerve cell death in this model. Further results showed that CBD pretreatment extended survival times for worms on 6-OHDA, by 28.8% at the highest tested dose. In another worm model — one without the fluorescent cell — CBD pre-treatment extended survival by up to 45.1%.

The use of CBD also normalized food-seeking behavior, which is disrupted in nematode worms given 6-OHDA because dopamine — a chemical messenger used for communication by nerve cells — is important for governing feeding behavior in *C. elegans*.

Parkinson's is characterized by the formation of toxic aggregates, or clumps, containing the protein alpha-

synuclein. These aggregates are thought to contribute to neuronal death and dysfunction in the disease.

In a series of further experiments, the researchers tested CBD's effects in worms that were genetically engineered to produce a clumping form of alpha-synuclein with a fluorescent tag.

Results showed that CBD treatment reduced the fluorescent signal in these mice — by 40.6%, 56.3%, and 70.2% at doses of 0.025, 0.05, and 0.1 mM, respectively — indicating that it reduced toxic alpha-synuclein clumping. Further analyses confirmed the reduction in alpha-synuclein clumping, and showed that CBD treatment helped normalize the activity of certain fatty molecules that are disrupted by aggregated alpha-synuclein.

CBD treatment increased the activity of a cellular "garbage disposal" system called the ubiquitin-like proteasome system (UPS), and it also showed antioxidant activity, reducing levels of toxic molecules called reactive oxygen species.

While the researchers emphasized that more research is needed to fully define CBD's biological mechanisms of action and its potential therapeutic benefits in Parkinson's, they said these findings broadly support CBD as a potential anti-Parkinson's therapy. They noted that this study "is the first report on the anti-parkinsonism role of CBD in *C. elegans*" Parkinson's disease models. "The worms have an easy culture method, a short life cycle with a simple neuron network, and a conserved nervous system pathway," the team wrote.

### December Meeting—December 7, 2022

We welcome **Char Grossman, Director and Founder of YogaReach® LLC** is a compassionate, highly trained, nationally certified school psychologist and certified yoga therapist (C-IAYT). Char has invested decades teaching special education and working as a school psychologist. Her individualized and specialized instruction has aided Char in creating a state-of-the art program to help those facing a variety of health challenges. Char also teaches at InMotion and will speak on her development of her Parkinson's Disease specific YogaReach Mindful Movement program. She look to do a few movements as well.

**DISCLAIMER:** The material contained in this newsletter is intended to inform. PEP makes no recommendations or endorsements in the care and treatment of Parkinson's disease. Always consult your own physician before making any changes. No one involved with the newsletter receives financial benefit from any programs/products listed.

## PEP NEWS

Parkinson Education Program  
of Greater Cleveland  
2785 Edgehill Rd.  
Cleveland Heights, OH 44106

### Address Service Requested

We try to keep our roster current. If you no longer wish to receive this bulletin or would like to receive it via email instead, notify Katherine.A.Kaminski@gmail.com or call 216-513-8990.

### Could Climbing Help People with PD Reach New Heights?

Speaking to medical news provider 'Medscape,' Dr. Heidemarie Zach – associate professor of neurology at the Medical University of Vienna, Austria, and an author on the study – said: “As long as you can walk independently and walk up a stair, you can go climbing. There’s no hurdle too high over which you can’t climb or burden you can’t conquer.”

### MJFF Grant Supports Research of Brain Inflammation

*(Excerpt from parkinsonsnewstoday.com)*

Muna Therapeutics has received a \$4.9 million grant from The Michael J. Fox Foundation for Parkinson’s Research (MJFF) to advance development of its first-in-class small molecules used to halt neuroinflammation and restore nerve cell function in people with PD. The grant will fund preclinical research into small molecules that block the action of Kv1.3, a potassium channel, in microglial cells, which are the brain’s immune cells. Chronic inflammation in the brain (neuroinflammation) is a hallmark of PD, Alzhei-

mer’s, and other neurodegenerative diseases. Evidence shows that microglia cells become overactive during Parkinson’s and are a major contributor of neuroinflammation. High levels of Kv1.3 have been found in microglial cells of mouse models and post-mortem brain samples of people with PD or other neurodegenerative diseases.



### TRIBUTES

Anonymous

**TO REACH US AT PEP 440-742-0153** dbrandtpep@gmail.com—  
Facebook – Parkinson  
Education Program of Greater Cleveland

We need your donations to continue bringing you the PEP News and for other expenses. A special thanks to those who contribute at the monthly meetings. To send a donation, please make your checks payable to Parkinson Education Program and mail to 2785 Edgehill Rd., Cleveland Heights, OH 44106