



PARKINSON News

PUBLISHED BY THE PARKINSON ASSOCIATION OF GREATER DAYTONA BEACH (PAGDB)

THE ACHES & PAINS OF PARKINSON'S DISEASE

Tuesday, September 19, 2023 • 2:00–3:30pm

Woodmark Pacifica Senior Living • 900 LPGA Blvd. Daytona Beach

The PAGDB is pleased to host Dr. Marina Mitry-Hana, DPT, PT, OTR/L, LSVT-BIG. Dr. Mitry-Hana works at Thomas Center for Physical Therapy, a locally owned clinic that has been in the Daytona Beach community since 1985. The Thomas Center for Physical Therapy offers specialized non-invasive patient care, provided in one-on-one direct treatment sessions with a therapist using hands-on manual therapy and targeted exercises catered to the individual patient's needs.



Dr. Marina Mitry-Hana

In her presentation **"The Aches and Pains of Parkinson's Disease"**, Dr. Mitry-Hana will provide attendees with education on common physical impairments that occur with PD (including the care providers of those with PD), such as back, shoulder, and knee pain, and the effect of PD on the treatment of these conditions. The benefits of Physical Therapy in effective conservative management of these issues with consideration of PD on exercise tolerance and interventions will also be discussed, with a demonstration of LSVT-BIG exercises which can be incorporated into treatment.

This is an In-Person Only program. To secure your seats please register online at: www.parkinsondaytona.org/in-person-meetings, or click the red button below or call 386-871-3879 and leave a message with your name and how many will be attending.

Register for In-Person Meeting

2024 PAGDB Fun Walk Date is Set!

Saturday February 24, 2024 • 10am–2pm

Mark your calendars and plan on attending the PAGDB's 15th Annual Sole Support for Parkinson's Fun Walk scheduled for Saturday February 24, 2024 from 10am–2pm at the City of Port Orange Lakeside Community Center & Amphitheater. Register online at www.parkinsondaytona.org or see the printable registration form on Page 8 in this newsletter. Register early, and join in to support your local Parkinson Association. We hope to see you all there!

IN THIS ISSUE

- 2 October Meeting Info. & July Recap
- 3 August Recap, Wholistic Mvmt.
- 4 RSB OB & Puzzle Answers
- 5 Events Calendar
- 6 Article
- 7 Puzzle
- 8 Fun Walk Registration Form
- 9–11 The Wellness Corner
- 12–13 Brooks Rehab Flyers
- 14–19 Hurricane Prep & Info.
- 20 Contact, BOD Information & Online Exercise Class Information

RECENT GIFTS & GRANTS

- ♥ Jerome Unatin, MD – Gift to PAGDB
- ♥ FOE Auxiliary 3800 – Gift to PAGDB

A huge debt of gratitude to all those that donate to our cause. Your gifts and grants go a long way in enabling us to carry on. Thank You!

To make a gift in honor or memory of a friend or loved one, to provide a grant, or to simply donate to the PAGDB cause: By mail, please make checks payable to Parkinson Association of Daytona and mail to P.O. Box 4193 Ormond Beach, FL 32175. To donate online, please go to our website at www.parkinsondaytona.org and click on the Donate link.

DONATE



SUBSCRIBE TO OUR YOUTUBE CHANNEL

OCTOBER MEETING – SPECIAL EVENT!

Tuesday, October 17, 2023 • 2:00–3:30pm

Woodmark Pacifica Senior Living • 900 LPGA Blvd. Daytona Beach

For our October meeting we will be showing the acclaimed **Michael J. Fox Documentary – “Still”** Along with the show, Ice Cream Treats will be provided for all those in attendance! This Special Event is being made possible by our 2022–2023 Fun Walk Marquee Sponsor – **SUPERNUS**.



This is an In-Person Only program. To secure your seats please register online at: www.parkinsondaytona.org/in-person-meetings, or click the red button below or call 386-871-3879 and leave a message with your name and how many will be attending.

[Register for In-Person Meeting](#)

JULY 18TH PROGRAM - FOLLOW UP TAKEAWAYS

Our July 18th program “Assistive Technology for Parkinson’s Disease” featured Carolyn Buchanan, M.A., CCC-SLP, ATP, and Regional Clinical Coordinator for Florida Alliance for Assistive Services & Technology (FAAST) discussing a wonderful federally funded resource available for people with deficits or disabilities, including PWP.

FAAST is the state of Florida’s assistive technology program. Assistive technology activities provided by FAAST include device loans, device demonstrations, device reutilization, device training programs, information and assistance, and a statewide financing program. FAAST can also connect individuals with needed equipment and supplies, often at dramatically reduced costs (sometimes for free or on lend) including: adaptive utensils, durable medical equipment (such as wheelchairs, walkers) and other mobility/adaptive equipment and supplies. FAAST also provides access to a wide variety of technological devices and resources providers.

This wonderful program shed light on a valuable resource provider in our community – A BIG Thank You to Carolyn Buchanan for an excellent and comprehensive presentation! To see what products, services and resources that are available through FAAST, please visit their website at: www.floridafaast.org.



Attendees attentively engage with program presenter Carolyn Buchanan



Folks gather around Carolyn Buchanan after the program to check out a large sampling of devices available thru FAAST



The bad news is time flies.
The good news is you're the pilot.

– Michael Altshuler



AUGUST 16TH PROGRAM - FOLLOW UP

On Wednesday August 16th, Reneee Shoner and the Palm Coast group hosted Neurologist and Movement Disorder Specialist from the Mayo Clinic Dr. Philip Tipton, MD., and Boxing Coach/Owner of Lions Pride Boxing Rick Fontan. Dr. Tipton addressed the group on a wide range of topics involving PD and other Movement Disorders including an involved Q&A interaction with the audience. Rick Fontan treated attendees to a 20-minute Rock Steady Boxing warm up program accompanied by some great music. The combination of Dr. Tipton and Rick Fontan provided a one-two punch of a wonderful program that was thoroughly enjoyed by all!



Angela Wlodarz with SUPERNUS visits with Dr. Tipton, MD before the show



Boxing Coach Rick Fontan gets the attendees charged up



Dr. Philip Tipton, MD from the Mayo Clinic in Jacksonville - addresses the audience

WHOLISTIC MOVEMENT!

A COMBINATION EXERCISE CLASS FOR PEOPLE WITH PARKINSON'S (PWP) DESIGNED TO ENHANCE THE ENTIRE BEING



GABRIELA TROTTA
INSTRUCTOR

This program is Free of Charge. Attendees must sign in for every class and can park on the north side of Pictona directly in front of the Senior Activity Center.

This program is made possible by Florida Healthcare, Halifax Health/Brooks Rehab, Pictona, and the Parkinson Association of Greater Daytona Beach (PAGDB). For more information or any questions please contact Vince Kinsler at 386-871-3879.



WEDNESDAYS
1:30-3:00PM



1060 RIDGEWOOD AVE. (U.S. HWY. 1)
HOLLY HILL, 32117



ROCK STEADY BOXING ORMOND BEACH IS BACK!

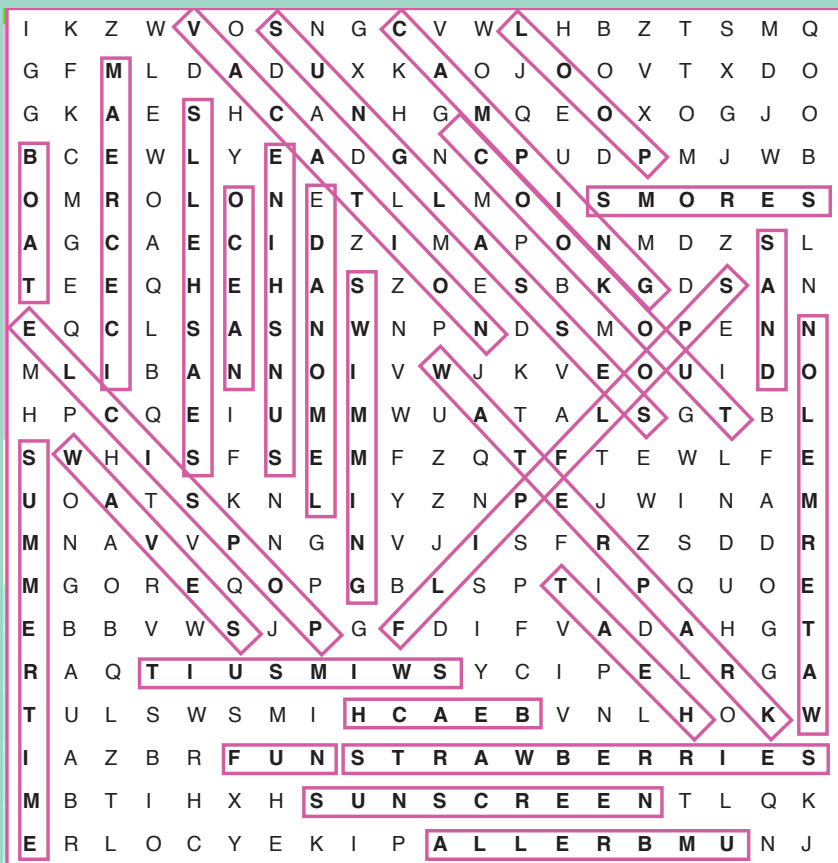
**TUESDAYS & THURSDAYS
9:00 AM - 10:30 AM**

**BODY EXCHANGE BOXING GYM
58 W. GRANADA BLVD · OB**

IF YOU ARE NEW OR CURIOUS ABOUT FIGHTING BACK AGAINST PARKINSON'S DISEASE, WE WELCOME YOU TO JOIN US AND SCHEDULE YOUR FREE ASSESSMENT REQUIRED TO GET YOU STARTED.

**ASSESSMENT DOES NOT INCLUDE BOXING GEAR.*

386-314-6673



Summer Word Search Answers

See **Page 7** in this newsletter for our Summer Themed Word Search. Answers will be in the next newsletter edition.

Completing puzzles can strengthen the mind and help patients manage Parkinson's symptoms. Jigsaw puzzles, in particular, can increase skills of problem-solving, coordination, matching, and memory.

COMMUNITY CALENDAR & EVENTS

EAST & WEST VOLUSIA SUPPORT GROUPS

In conjunction with Halifax Health, the PAGDB is hosting Support Groups designed to provide a place for individuals with PD and their caregivers/loved one's to share their feelings, experiences, provide support and resources. These programs are offered free of and are facilitated by Anne Tracy, RN Community Relations Coordinator with Halifax Health Continuing Care and Hospice. **For more information please contact either Anne Tracy at 386-566-5728 Email: annette.tracy@halifax.org or Vince Kinsler at 386-871-3879 Email: yovinnny57@aol.com**

EAST VOLUSIA

4TH TUESDAY OF EACH MONTH FROM 2-3PM • WOODMARK • 900 LPGA BLVD. HOLLY HILL, FL
NEXT MEETING: Tuesday, September 26, 2023 • Tuesday, October 24, 2023

WEST VOLUSIA

2ND TUESDAY OF EACH MONTH FROM 2-3PM • WOODLAND TOWERS • 113 CHIPOLA AVE. DELAND, FL
NEXT MEETING: Tuesday, September 12, 2023 • Tuesday, October 10, 2023

FLAGLER SUPPORT GROUP

PALM COAST COMMUNITY CENTER • 305 PALM COAST PARKWAY NE, PALM COAST
The Flagler/Palm Coast Support Group is hosting monthly meeting at the Palm Coast Community Center. For more information, please contact Renee Shoner at 386-503-2239 or email at: Reneeshoner@gmail.com.

ROCK STEADY BOXING

For more information on classes, times and to schedule an assessment 386-314-6673 | www.inthiscorner.org

NEW SMYRNA BEACH/EDGEWATER

MONDAY, WEDNESDAY & FRIDAYS • 201 SOUTH RIDGEWOOD AVE. SUITE 13 EDGEWATER, FL

ORMOND BEACH

TUESDAYS & THURSDAYS 9-10:30AM • BODY EXCHANGE BOXING GYM • 58 WEST GRANADA BLVD. ORMOND BEACH, FL

YOGA & DANCE NSB

TUESDAYS 1PM • 201 SOUTH RIDGEWOOD AVE. SUITE 13 EDGEWATER, FL

A combination yoga and dance class that is well coreographed to include warm up, upper/lower body, cardio, breathing exercises and a cool down. This class is instructed by Gabriella Trotta. **This class fills up quickly & seats are limited.** www.inthiscorner.org | 386-314-6673

WHOLISTIC MOVEMENT!

WEDNESDAYS 1:30-3:30PM • PICTONA - 1060 RIDGEWOOD AVE. HOLLY HILL, FL

A combination of physical exercises designed to benefit the entire being; yoga, dancing, tai chi, stretching, and aerobics. This class is instructed by Gabriela Trotta and offered free of charge. Care providers, wheelchairs and walkers welcome to participate. Attendees must sign in for every class.

BROOKS REHAB

Brooks Rehab is offering an **Adaptive Sports & Recreation Programs (you do not need to be athletic to participate!) provided FREE of charge!** Brooks also offers Exercise & Wellness Programs at several YMCA locations throughout Volusia County. Cost for these programs is \$15.00 per month for YMCA members, and \$30.00 per month for non-YMCA members. **See flyers in this newsletter or our website for days, times and locations of these programs.**

NLX-112: A First-In-Class, Dual-Acting, Non-Dopaminergic, Drug Candidate for Treatment of Parkinson's Disease

Article Reprinted FR: WPC BLOG – August 14, 2023 – Clinical Science

The main drug used to treat Parkinson's disease (PD) is levodopa, a substance which enhances brain levels of dopamine, a neurotransmitter that is compromised by the disease. Although levodopa is highly effective in managing the motor symptoms of PD, after extended treatment it can elicit troublesome involuntary movements called dyskinesia (levodopa-induced dyskinesia, LID).

Current treatment options for LID are not satisfactory: lowering levodopa dosing can worsen parkinsonism; Deep Brain Stimulation requires invasive surgery and amantadine (the only approved drug for LID) is only partially effective and has side-effects of its own. Thus, well-tolerated and effective treatments for LID remain a pressing medical need.

A new drug candidate, NLX-112, may be able to address this need. It was previously investigated as a possible treatment for pain indications, but is now aimed at LID, based on its promising activity in a series of studies using animal models of PD. Two charities, Parkinson's UK and The Michael J Fox Foundation, co-funded a clinical trial in Sweden to test, for the first time, the effects of NLX-112 in people with Parkinson's (PwP) with troublesome LID.

The trial was a placebo-controlled, double-blind study. 15 patients treated with NLX-112 and 7 treated with placebo completed the study. The primary outcome was to determine the safety and tolerability of NLX-112. The compound has previously been safely administered to over 600 people in other studies, but not to PwP, so it was important to check that it is well tolerated in this population. This was indeed the case: side-effects were mild or moderate and their number was similar between the NLX-112 and the placebo groups.

The secondary outcome of the clinical trial was therapeutic efficacy against LID. To measure this, study participants came into the clinic before starting treatment and twice during the study. At each clinic visit, they received a booster dose of levodopa and the severity of their dyskinesia was assessed by a clinical investigator using an established rating scale, the Unified Dyskinesia Rating Scale (UDysRS). As expected, LID was significantly reduced in the NLX-112 group and not in the placebo group. In addition, the anti-dyskinetic effect of NLX-112 increased over the course of the study, suggesting that additional benefit could be obtained with longer treatment durations.

The next important parameter of the clinical trial was to determine whether NLX-112 influenced parkinsonian symptoms, measured using another rating scale, the Unified Parkinson's Disease Rating Scale (UPDRS). Some previous anti-LID drug candidates have been reported to interfere with the beneficial anti-parkinsonian effect of levodopa, but this was not the case for NLX-112. In fact, NLX-112 lowered UPDRS scores, indicating that it further reduced parkinsonism, even though the study participants had taken a booster dose of levodopa.

These are striking findings: NLX-112 had a dual benefit, not only decreasing LID, but also further reducing parkinsonism symptoms. Such a profile has not been observed for other anti-parkinsonian drugs and may arise from NLX-112's original mechanism of action. Indeed, whereas levodopa and most other existing drugs target the dopamine neurotransmitter system in the brain, NLX-112 targets the serotonin (5-hydroxytryptamine, 5-HT) system.

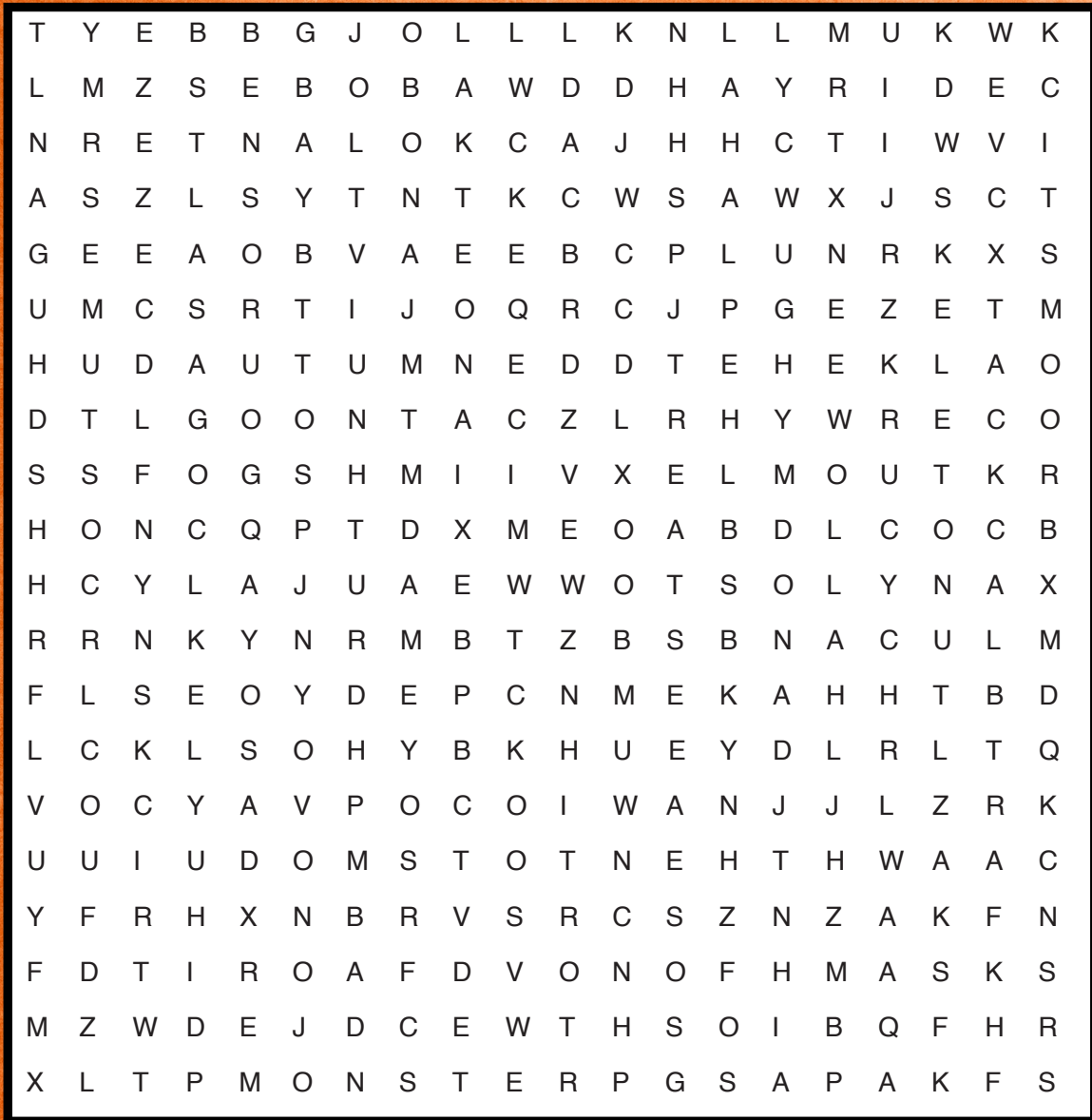
Over recent years, there has been increasing interest in the role of serotonin in PD, and particularly in a serotonin receptor called the 5-HT_{1A} receptor. NLX-112 is both exceptionally selective for 5-HT_{1A} receptors and fully activates them, properties which likely underlie the clinical benefits seen in the present study. Moreover, the serotonergic properties of NLX-112 raise the intriguing possibility that it may also improve non-motor symptoms of PD. This is because serotonin is involved in the control of depression, anxiety, and pain, all of which are experienced by PwP and may be alleviated by a 5-HT_{1A} activator such as NLX-112.

Nevertheless, further clinical studies are necessary before NLX-112 can be made available as an approved drug. Specifically, trials need to be carried out with larger numbers of patients, longer treatment durations and higher doses of NLX-112. If successful, these trials will provide the data necessary for regulatory submission and approval for commercial use, bringing much-needed relief to many PwP living daily with LID and other motor and non-motor symptoms of PD.

Adrian Newman-Tancredi, PhD, DSc is the CEO at NeurolixInc. His abstract submitted to the WPC 2023 was selected for a Hot Topics talk. He presented his research at WPC 2023 in Barcelona.

Ideas and opinions expressed in this post reflect that of the author(s) solely. They do not necessarily reflect the opinions or positions of the World Parkinson Coalition®

HALLOWEEN WORD SEARCH



AUTUMN
 BATS
 BLACK CAT
 BOO
 BROOMSTICK
 CANDY

CANDY CORN
 COSTUMES
 FALL
 GHOST
 HALLOWEEN
 HAUNTED HOUSE

HAYRIDE
 JACK O LANTERN
 MASKS
 MONSTER
 OCTOBER
 PUMPKINS

SCREAM
 SKELETON
 SPOOKY
 TREATS
 TRICKS
 WITCH



15th ANNUAL “SOLE SUPPORT” FOR PARKINSON’S FUN WALK
Port Orange Lakeside Community Ctr. – Saturday February 24, 2024 - 10:00am-2pm
****Registration Begins at 9:00am**

-REGISTRATION FORM-

IMPORTANT: This registration form must be filled out in its entirety, signed, and mailed with your \$25.00 check made payable to the Parkinson Association of Daytona to P.O. Box 4193 Ormond Beach, FL 32175 and be postmarked no later than February 2, 2024. Registration forms received after 2/4/24 cannot be guaranteed an event T-shirt/goody bag. *For children 12 & under the registration fee is \$15.00. For all registrants less than 18 years of age, a parent or responsible adult must designate as a minor child by checking here: _____ and fill out this form in the minor’s name and sign on behalf of the minor child.*

PLEASE PRINT CLEARLY:

Last Name: _____ First Name: _____

Address/City/State/Zip: _____

Phone: (_____) _____ Email Address: _____

Age (if U-18): _____ T-Shirt Size: (circle one) S M L XL XXL

*****All registrants – MUST CHECK IN AT THE REGISTRATION TABLE PRIOR TO THE WALK – at check in you will receive a ticket for door prize drawings.***

Participation Release (PR)

By registering to participate in the Parkinson Fun Walk 2024 (event); I understand and agree, that participating in this event may involve risk of personal injury which may result from not only my own actions, inactions, or negligence, but also from the actions, inactions, or negligence of others, the condition of the facilities, equipment, or areas where the event is taking place, and or the parameters associated with the event itself. Being in full knowledge to the foregoing, I hereby release, indemnify, and hold harmless the City of Port Orange, the Parkinson Association of Greater Daytona Beach (PAGDB), and all individuals, agents, employees, volunteers, representatives, officers, directors, and insurance companies associated with the PAGDB, of and from any and all liability, claims, demands or causes of action whatsoever arising out of or related to any loss, damage, injury (up to and including death) that may be sustained by me or my property while participating in this event. I further agree, that by participating in this event, that if I suffer any injury or illness, I authorize the event facilitators to use their discretion to have me transported to a medical facility for treatment, and I assume full responsibility for this action. By signing below, I attest that I have read, understand, and agree to the entire content of this PR, that I am in good physical condition and have no medical condition that would be detrimental to my health or wellbeing by participating in this event. Further, I hereby grant full permission to the PAGDB, to use photos, videos, and any other record of me during this event for any purpose, and for which I agree to receive no compensation whatsoever in return. This PR shall be binding upon me, my heirs, my executors, legal representatives, and my assigns. This PR is construed to the laws of the state of Florida. **I agree that I am participating at my own risk.**

Signature of Registrant or Parent/Responsible Adult

Date

_____ **X here if you cannot participate** in the Parkinson’s Fun Walk 2024 **but would like to help support our cause;** all donations are gratefully accepted and much appreciated! Please make checks payable to the Parkinson Association of Daytona and mail to P.O. Box 4193 Ormond Beach, FL 32175. **Thank You!**

The Fun Walk Will Take Place Rain or Shine!

FW/2024

THE WELLNESS CORNER

Why Parkinson's research is zooming in on the gut

Several studies from the past 12 months have focused on one particular aspect of Parkinson's disease, namely gut health. But why is gut health important in Parkinson's, and what could it reveal about the disease?

Why look to the gut?

Over the past few years, an increasing amount of evidence has come to light indicating that there is a two-way communication route between the brain and the gut. Researchers have termed this the gut-brain axis.

The gut-brain axis has been implicated in many health conditions affecting the brain, from dementia to depression. And while the gut-brain connection may be less obvious in other conditions, it is, in fact, clearer in Parkinson's disease, which, in some people, is also characterized by gastrointestinal symptoms, such as constipation.

One perspective on Parkinson's disease, known as the Braak hypothesis, suggests that, in many cases, an unknown pathogen can reach the brain via two routes, one of which implicates the gut.

According to this hypothesis, one way for pathogens to reach the brain could be by being swallowed, reaching the gut, and then advancing to the brain via the vagus nerve — the longest cranial nerve that connects the brain with, among others, the intestines. This may then trigger the onset of Parkinson's disease.

In our podcast, Dr. Demirkan acknowledged that, at first, the notion of looking to the gut to understand more about Parkinson's disease might seem surprising, but that the Braak hypothesis provides an intriguing lens through which to assess potential mechanisms at play.

"[Through the Braak hypothesis,] there comes the idea that the disease actually starts in the intestines, and then through the vagus nerve, it spreads to the other tissues and toward the brain," she explained.

According to her, Parkinson's disease is the neurological condition most interesting to study in relation to gut health for one simple reason: Parkinson's gut microbiome stands out the most.

Gut microbiome is different in Parkinson's

Through the recent study they conducted, Dr. Demirkan and her colleagues saw that individuals with Parkinson's disease had distinct gut microbiomes characterized by dysbiosis — the phenomenon of imbalance between so-called good versus bad bacteria.

Their study suggested that around 30% of the proportion of gut bacteria in people with Parkinson's disease is different from those without Parkinson's.

"We found one-third of these microbes [in the gut of people with Parkinson's] to be different," Dr. Demirkan said on the podcast.

"So this is a very strong indication of dysbiosis. And also how they [the bacteria] function, what kind of genes they carry, [these aspects were] also different. We found a reduced [amount of] short-chain fatty acid producers, for example, bacteria that [are] known to be gut-friendly [...]. We found increased pathogenic bacteria [...], including *Escherichia coli*, and we found a lot of bacterial pathways disturbed as well, potentially affecting the well-being of the neuronal tissues."

Dr. Demirkan and her colleagues found that bacteria such as *Bifidobacterium dentium* — which can cause infections such as brain abscesses — were at significantly elevated levels in the gut of people with Parkinson's disease.

Other infection-causing bacteria more abundant in people with Parkinson's were *E. coli*, *Klebsiella pneumoniae*, which can cause pneumonia, and *Klebsiella quasipneumoniae*, which can cause similar infections.

The study conducted by Dr. Demirkan was not the only recent research to zoom in on the differences in gut bacteria.

Research from the University of Helsinki — published in May 2023 in *Frontiers* — in animal models of Parkinson's disease, suggests that *Desulfovibrio* bacteria may be implicated in this condition. These bacteria produce hydrogen sulfide, which may lead to forms of inflammation. *Desulfovibrio* also came up in a study from The Chinese University of Hong Kong, appearing in May 2023 *Nature Communications*.

This study, whose aim was to find a method of diagnosing Parkinson's earlier, identified an "overabundance" of these bacteria in people with REM sleep behavior disorder and early markers of Parkinson's.

REM sleep behavior disorder is a deep sleep disturbance tied to a higher risk of Parkinson's disease. In people with this disorder, the usual brain mechanisms that prevent them from "acting out" the content of their dreams no longer work, which means that they perform uncontrolled movements in their sleep.

Shaughnessy told us that he, too, experiences deep sleep disturbances. "[O]ver the last few years, I have very really vivid dreams, and [...] I've fallen out of bed a few times because I'm turning over doing something, you know, sort of dealing with whatever it is in the dream," he described.

What are the potential mechanisms?

If gut bacteria do play a role in Parkinson's disease, the question that arises is: What mechanisms might mediate their impact on neurological health?

One hypothesis hinted at in the studies on the link between the gut and the brain in Parkinson's is that systemic inflammation may be one of the mechanisms involved, since some of the bacteria that are overabundant in this condition are pro-inflammatory, meaning that they can trigger inflammation.

There is research indicating that immunosuppressant medication is associated with a lower risk of Parkinson's disease, which suggests that a similar type of medication may also help manage the condition.

Indeed, chronic brain inflammation is an important part of Parkinson's disease, and some studies seem to indicate that systemic inflammation may worsen brain inflammation and thus contribute to disease progression.

Some inflammatory conditions have actually been linked with a higher risk of Parkinson's. For example, one Danish study from 2018 suggested that people with inflammatory bowel disease (IBD) have a 22% higher risk of Parkinson's disease than peers without this inflammatory condition.

In the podcast, Dr. Demirkan agreed that inflammation linked to Parkinson's disease may start in the gut, caused by "bad" bacteria. However, she emphasized that this potential mechanism is not yet confirmed, and further research on this topic is necessary to draw firm conclusions.

Could diet fight dysbiosis in Parkinson's?

If gut bacteria may play a role in Parkinson's disease, it may seem reasonable to infer that diet could help fight gut dysbiosis and perhaps provide an easy option for symptom management.

While there are some dietary recommendations and nutritional supplements that may help provide some symptom relief for some people, it remains unclear just how much diet can actually do to alter the course of this disease.

One study from 2022 suggests that diets high in flavonoids — natural pigments found in many fruits — are linked to a lower risk of mortality in Parkinson's disease.

And an older study, from 2018, argued that a protein found in many types of fish, called "parvalbumin," may help prevent Parkinson's disease by stopping alpha-synuclein from collecting into clumps in the brain — which is what happens in the brains of people with Parkinson's, disrupting signals between brain cells.

However, when asked about the potential of diet and supplements to regulate gut bacteria in people with Parkinson's, Dr. Demirkan expressed some reservations.

She emphasized that since people have different risk factors for Parkinson's, as well as different iterations of the disease, it is difficult to make general recommendations that would actually prove helpful:

"It's very difficult for me to advise anyone anything [...] because we are all very individual, our gut microbiome is individual. So prevention [of the condition] is [one thing] I think, and the long-term maintenance is something else, together with the other complications of the disease. So I cannot really advise anything, but studies show there is a problem with increased sugar consumption. [...] There are some intervention studies on diet indeed, but it's very difficult [to conclude anything], as the studies are not really [...] finalized. [It is difficult to know] how to advise an individual with a certain genetic and lifelong history of exposure to different things, because we don't know what is in [them]."

Exercise can help with Parkinson's

There is, nevertheless, some research suggesting that exercise can be an effective means of managing the symptoms of Parkinson's disease.

One study from 2022, published in *Neurology*, suggested that participating in regular, moderate-to-vigorous exercise could help slow down the progression of Parkinson's disease for those in the early stages.

Research from 2017 advised that at least 2 and a half hours of exercise per week could help people with Parkinson's improve their mobility while slowing down disease progression.

Dr. Demirkan agreed that exercise can be a helpful strategy for managing Parkinson's disease. "[E]xercise itself is an amazing way of shaping our brain and body," she said.

"[I]n terms of reversing [Parkinson's] pathology, there are some large physiological effects that we can think about. If you're running a marathon, for example, it's a big thing that your body has to go through. [...] [F]or instance, one thing is that your heat increase for a long time in like a [...] feverish way, right? There is a long-term increase in the core heat, that's one thing, and that should definitely have an important effect [on the gut]," she explained.

Indeed, some research suggests that the heat stress taking place during exercise could reduce intestinal blood flow, which eventually may impact the gut microbiome by potentially suppressing some bacteria and making room for others to expand.

As to which form of exercise is best for people with Parkinson's disease, a Cochrane review published in January 2023 concluded that pretty much all forms of exercise can help improve life quality for those living with this condition.

According to the review authors, existing evidence suggests that aqua-based training "probably has a large beneficial effect" on quality of life. Endurance training is also helpful, both in improving life quality, in general, and in managing motor symptoms, in particular.

When it comes to managing motor symptoms, the authors write that dance, aqua-based exercise, gait/ balance/ functional exercise, and multi-domain training could all be equally helpful.

And some past research — in women with overweight but without Parkinson's — has suggested that endurance training results in an increase in beneficial bacteria called *Akkermansia*, which contribute to improved metabolic function.

Shaughnessy, who regularly takes part in demanding and arduous marathons and other sports challenges to raise funds for Parkinson's research told us that exercise has helped him more than anything in maintaining his well-being.

"[E]xercise has become a big part — was already a part of my life before [the diagnosis], but it's become [...] a big way of helping me to manage and control the condition," he told us in the podcast.

"I gradually went from, you know, a bit of running to marathons. And then the latest thing I've done was a 14-day cycle from Liverpool to Ukraine — 1,400 miles, which was probably a little bit beyond my capability, to be honest," he mused.

But challenging himself in this way, he said, truly helped him on a mental level. "[W]hile I'm exercising, I don't feel like I have Parkinson's, quite often," Shaughnessy told us.

For him, it is all about focusing on what you are actually able to achieve at any given point in time, and aiming for that.

"[A big part] of managing the condition, I think, is around your mental attitude. Because when I first was diagnosed, I actually found it very difficult, running. And I'd go running as part of being on business trips abroad and so on, I'd run in cities I went to, and I did decline in the first months, quite rapidly in terms of my running. But my wife actually said to me, 'just focus on what you can do, not what you can't do.' And that was a bit of a turning point for me. And, you know, by not worrying about [it], I've got to get better and go quicker, and just focus on enjoying my running. And, you know, actually, ironically, I have got better and I ran my personal best in the marathon in May this year — so, 8 years after diagnosis."

– Gary Shaughnessy

LATEST NEWS IN PD

Two new studies are shedding more light on Parkinson's disease, both focusing on how to identify and diagnose the neurodegenerative disease earlier in the hopes of better treatment or even prevention.

Autoimmunity and the gut

Previous research by neurobiology professor David Sulzer pointed toward the role of an autoimmune response in Parkinson's disease, so his team dug deeper.

In Parkinson's, a protein called alpha-synuclein becomes misfolded, accumulates inside neurons and slowly poisons the cells. Sulzer's lab noticed that small portions of the misfolded alpha-synuclein can also appear on the outside of neurons, which makes the neurons vulnerable to attack from the immune system.

"The blood of Parkinson's patients often contains immune cells that are primed to attack the neurons, but it's not clear where or when they are primed," said Sulzer.

Still, he and his team were immediately suspicious of gut.

To test their theory, the researchers created a mouse capable of displaying pieces of misfolded alpha-synuclein on cell surfaces (since natural mice do not have this ability). Then, they injected the mice with alpha-synuclein and monitored what happened in the brain and the gut.

According to the study results, published in *Neuron*, the researchers did not see any signs resembling Parkinson's disease in the brain, but they did see that an immune attack on neurons in the gut produced constipation and other gastrointestinal effects resembling those seen in most Parkinson's patients years before they are clinically diagnosed with the disease.

"This shows that an autoimmune reaction can lead to what appears to be the early stages of Parkinson's, and is strong support that Parkinson's is in part an autoimmune disease," said Sulzer.

That means that the early detection and intervention of an immune response in the gut could prevent a later attack on the brain's neurons—stopping Parkinson's in its tracks. disease," said Sulzer.

That means that the early detection and intervention of an immune response in the gut could prevent a later attack on the brain's neurons—stopping Parkinson's in its tracks.

Retinal imaging

Scientists have developed eye scans that use artificial intelligence to detect markers of Parkinson's disease seven years before symptoms appear, making it the first time the condition can be detected several years before diagnosis.

In the largest study to date on retinal imaging in Parkinson's disease, researchers at University London College identified markers that indicate the presence of the neurodegenerative disease

The team used the AlzEye database, as well as the UK Biobank as healthy controls to detect the subtle markers.

Post-mortem examination of patients with Parkinson's disease has found differences in the inner nuclear layer (INL) of the retina. Previous studies using a type of 3D scan known as optical coherence tomography (OCT) scans have also found potential morphological abnormalities associated with the disease—but with inconsistencies.

According to the new study, published in *The Lancet Digital Health*, results confirmed previous reports of a significantly thinner ganglion cell-inner plexiform layer (GCIPL), while for the first time finding a thinner INL. It further found that a reduced thickness of these layers was associated with increased risk of developing Parkinson's disease, beyond that conferred by other factors or comorbidities.

Future studies are needed to determine whether progression of GCIPL atrophy is driven by brain changes in Parkinson's disease, or if INL thinning precedes GCIPL atrophy. Exploring this could help explain the mechanism and determine whether retinal imaging could support the diagnosis, prognosis and management of patients affected by Parkinson's disease.

STEPPING

The aim of this exercise is to control the way you step. It will help you to overcome problems you may experience of a quickening in your steps as you are walking, or if you have difficulty in initiating your steps.

Starting position: Stand with a good posture with your feet a comfortable distance apart. If you are not feeling very steady, hold onto a rail or the back of a sturdy chair until you become better at the exercise and confident enough to let go.

Instructions

1. Move the weight of your body onto your left leg.
2. Bend your right leg at the knee and hip so you come up onto your right toes.
3. When the weight is fully on the left leg and your right one feels light, lift it off the floor and slowly step it forwards.
4. As it is swinging forwards, pull your toes up so that it is your heel that lands on the ground first.
5. Slowly lower your toes down and gently allow your weight to transfer forwards onto the whole of the foot, with your right knee bending slightly as you do this. Do not let the left heel come off the ground and try not to let your body lean forwards at the hip.
6. Slowly return the weight back over the left foot until there is no weight on the right and it feels light and free enough to lift back to the starting position.
7. Swap legs and repeat this exercise four or five more times.

Progression

To progress with this exercise, you can:

- slow down the action, which demands more of your balance
- move the stepping leg forwards more to create a bigger step, or higher as if stepping onto a step, or sideways as if avoiding a puddle
- practice stepping backwards

*If you find it hard to lift one leg off the floor for this exercise, it may be that you have not transferred enough weight onto the standing leg or that you are not stood upright on that leg.

Halifax Health | Brooks Rehabilitation

Adaptive Sports and Recreation - Daytona Beach

MONDAY	Tai Chi 3:00–4:00PM Pictona at Holly Hill 1060 Ridgewood Ave Holly Hill, FL 32117	
	On-Water Rowing 8:00–10:00AM Halifax Rowing Boathouse 201 City Island Parkway Daytona Beach, FL 32114	Rec Game Night <small>[Rotating between Bocce Ball, Shuffle Board, Croquet and Horseshoes]</small> 4:15–5:15PM Pictona at Holly Hill 1060 Ridgewood Ave Holly Hill, FL 32117
TUESDAY	ERG Rowing 3:00–5:00PM Halifax Rowing Boathouse 201 City Island Parkway Daytona Beach, FL 32114	
WEDNESDAY	On-Water Rowing 8:00–10:00AM Halifax Rowing Boathouse 201 City Island Parkway Daytona Beach, FL 32114	Adaptive Yoga 1:30–2:30PM Port Orange Family YMCA 4701 City Center Parkway Port Orange, FL 32129
	THURSDAY	ALTERNATES EVERY FRIDAY
FRIDAY	Bowling 5:30–7:30PM Ormond Lanes 260 N US Highway 1 Ormond Beach, FL 32174	Billiards 4:30–6:30PM Uncle Waldo's Sports Pub 2454 Nova Road Daytona Beach, FL 32119

FOR MORE INFORMATION:

386.871.3024

Christi.Dillard@Brooksrehab.org



CENTER FOR INPATIENT REHABILITATION

Halifax Health | Brooks Rehabilitation

Wellness Program Weekly Calendar

**MONDAY
WEDNESDAY
FRIDAY**

Wellness Program

DeLand Family YMCA
8:30-11:30am

Wellness Program

Ormond Beach Family YMCA
12:00-4:00pm

**TUESDAY
THURSDAY**

Wellness Program

Ormond Beach Family YMCA
12:00-4:00pm

Ormond Beach Family YMCA:
500 Sterthaus Dr, Ormond Beach, FL

DeLand Family YMCA:
761 E International Speedway Blvd, DeLand, FL

FOR MORE INFORMATION:
386.871.3024
Christi.Dillard@Brooksrehab.org



STAY SAFE & PREPARED DURING EXTREME WEATHER CONDITIONS

With hurricane season in full swing below is a list of resources and tips to help you stay prepared. The following pages have checklists, prep tips, information and important phone numbers. **Thank you to our friends at Jax Hope for inspiring us and providing some of these resources!**

[National Hurricane Center](#) | [Emergency Prep Guides & Checklists Ready.gov](#) | [Ready.gov Hurricane Info](#) | [Ready.gov Hurricane Toolkit](#) | [Red Cross](#) | [FEMA](#)

Register for Florida Special Needs Registry

The Florida Department of Health and each local emergency management agency in the state, developed a registry for persons with special needs to register with their local emergency management agency to receive assistance during a disaster. The statewide registry provides first responders with valuable information.

[Volusia County Emergency Management](#) | [Flagler Emergency Management](#) | [Volusia County Special Needs Shelters](#)

Sign Up for Text Emergency Alerts. *Volusia County also has an app you can download* | [Click here](#) for Volusia County & City's within Volusia Alerts | [Click here](#) for Flagler County Alerts

Shelter Transportation (Votran) 386-322-5100 / 386-943-7050 / 386-424-6820
Citizens Information Center Volusia County (ONLY during a disaster) 866-345-0345

Tips & Prep for PD Patients (from Parkinson Foundation)

Preparing for extreme weather is a burden for anyone in the path of a storm or fire. People with Parkinson's disease (PD) and their caregivers should take these tips into consideration to ensure that all PD-related needs are accounted for when preparing for a hurricane or any other natural disaster.

- **Check all your medications.** Take inventory of all medications and reorder any that are running low.
- **Write your medication list down.** Write down or print a list of all your medications (not just PD medications). Include medication name, strength, times taken and dosages. This customizable medication schedule can help. [Print Medication Form](#)
- **Make a list of your doctors.** Make a list of your doctors and their contact information and take it with you if you need to evacuate before a storm.
- **Water and food preparedness.** Medications may need to be taken with a meal and usually water. Calculate five gallons of water per person per day. Buy enough water and food to last three to five days.
- **Stock your Hospital Safety kit** in the event you need to educate an emergency responder or health care professional about your PD needs. [Order a Care Kit Here - there are three options.](#)
- **Have your Medical Alert Card handy.** Keep it with you at all times. [Print one here.](#)
- **Check in with your support network before and after.** Arrange for at least one friend or family member to call you during a weather emergency, especially if you live alone.
- **Practice Anxiety reduction techniques.** The stress of possibly losing power or being evacuated could make anyone anxious, but stress can worsen PD symptoms. Download a meditation or breathing app or try to distract yourself by reading a book.
- **Know your nearest shelter.** Visit the Red Cross website to find yours. Depending on where you live and the progression of your Parkinson's disease, you may qualify for a Medical Special Needs Shelter where you can get additional assistance with basic tasks.
- **Fill up your gas tank and get cash** in case you need to evacuate.

Preparing for power loss:

- **Avoid Overheating.** If you lose air conditioning, monitor your body heat. Drink more than the recommended nine to 13 cups of water per day. Exercise in the early morning or late afternoon when cooler outside. Know the signs of heat stroke: flushed face, high body temperature, headache, nausea, rapid pulse, dizziness and confusion. If heatstroke is suspected, go to your nearest emergency room or urgent care for treatment.
- **Address lightheadedness.** Many people with Parkinson's experience Neurogenic Orthostatic hypotension (nOH), characterized by a drop in blood pressure when going from a seated position or lying down to standing. Exposure to heat can make nOH worse. If you regularly or occasionally experience lightheadedness or dizziness when you stand up, take extra precaution if you lose power and air conditioning by staying hydrated and standing up slowly.
- **Prepare your devices.** If you have a deep brain stimulator (DBS), make sure your patient controller is charged. If you use a DUOPA pump, plan ahead to keep your DUOPA cassettes refrigerated. Call your doctor to ask if you should have extra oral medication on hand in case you are unable to use your pump at any point.

Preparing for an evacuation:

- **Write and follow a packing list.** Make sure to include all medications, water and snacks
- **Know your community response plan.** Learn about your area's response and evacuation plans before a storm hits.
- **Take all your medications in their bottles with you.** You can keep them all in your Aware in Care kit.
- **Take your walker, cane or wheelchair.** Even if you only use it occasionally.
- **Consider your devices.** If you have a deep brain stimulator, remember to bring your patient controller. If your DBS neurostimulator is rechargeable, be sure that your recharger is fully charged and bring it along with the charging dock.



DISASTER SUPPLY CHECKLIST

WATER

- At least 1 gallon per person for five to seven days

CLOTHING

- Seasonal/rain gear/ sturdy shoes

BLANKETS/ PILLOWS

FIRST AID/ MEDICINE

PRESCRIPTION DRUGS

RADIO

- NOAA manually or battery-operated weather radio

CASH

- Banks and ATMs may not be open or available for extended periods

TOOLS

- Keep a set with you during the storm

PET CARE ITEMS

FOOD

- At least enough for five to seven days
- Non-perishable packaged or canned food/juices
- Foods or special items for infants, the elderly or pets; also snack foods
- Non-electric can opener, cooking tools/fuel Paper plates/plastic utensils

TOILETRIES & HYGIENE ITEMS

MOISTURE WIPES

FLASHLIGHT/ BATTERIES

KEYS

TOYS, BOOKS AND GAMES

IMPORTANT DOCUMENTS

- Insurance, medical records, bank account numbers, Social Security cards and utility records
- Document all valuables and their condition with videotape or photos if possible

VEHICLE FUEL TANKS FILLED

NOTES:

Some Other Helpful Things to Have:

- First Aid Kit / First Aid Items
- Portable charger/power bank (available at retailers like Amazon, Best Buy, Office Depot, Target, Walmart) to keep your cellular devices charged. Remember you will need to charge these before a storm arrives and they even sell solar powered charging devices too!
- Can Opener
- Don't forget water and medications for your pets too!
- Battery operated candles (unless you would like to use regular candles and matches!)
- Cooling Towels, Battery Powered and Handheld Fans
- Propane
- Cooler



HURRICANE HOME PREPARATION CHECKLIST

STOCK UP

- Make sure you have a good stash of supplies that could be useful to you in case of a major storm. This includes items like flashlights, batteries, radios, tarps, bottled water, sealed snacks, a generator, etc.

UPDATE YOUR INSURANCE

- Don't wait for a storm to approach, talk to your insurance agent about your insurance coverage and make sure you have enough coverage and the right type of coverage. In Florida, hurricane and flood insurance is often a necessity—your standard homeowner's policy may not be enough to cover you in the case of major storm damage. The Florida Office of Insurance Regulation offers some good advice and additional resources, on how to purchase flood insurance.

IMPORTANT DOCUMENTS

- In a hurricane, tree branches are a significant cause of damage. Cut back and branches that are over your home or directly in front of your windows. Additionally, check with a knowledgeable tree expert to make sure all the trees on your property are healthy and likely to make it through a storm.

GET YOUR ROOF READY

- Check for loose shingles or any repairs that need to be made and have a roofer come out NOW. If a storm is imminent, use hurricane clips or straps to secure the roof to the frame of your home.

SECURE LANDSCAPING AND PATIO FURNITURE

- Strap down or store patio furniture and any large pots so they don't become dangerous missiles in the middle of a hurricane. Any smaller items in your yard should be picked up and kept in a shed or garage.

SECURE YOUR WINDOWS AND DOORS

- Consider replacing your windows with impact-resistant windows. This type of glass doesn't break into large, sharp pieces if damaged.
- Replace broken windows which can let in wind and rain, damaging other areas of the house, causing mold and mildew, and increased pressure under the roof.
- Consider investing in storm shutters. If you don't have storm shutters, then board up your windows if a storm is coming.
- Don't worry about taping up windows - This is a waste of time.
- Make sure all windows and doors are locked (including deadbolts) and secured on all sides of your home.

SECURE YOUR GARAGE DOOR

- Standard garage doors are easily damaged during a hurricane. Check out the metal reinforcement kits available that let you strengthen your garage door. Like all of your exterior doors, check the weather sealing on your garage door to make sure it doesn't let water in your garage.

TAKE A VIDEO INVENTORY

- Walk through your home with a video camera (or even your phone if you can take videos) and take an inventory of all important items. This can make it much easier to file any insurance claims if needed.



Emergency Numbers

Agricultural Center

- DeLand (386) 822-5778

American Red Cross

- (386) 226-1400 (daily)
- (866) GET-INFO (during crisis)

City of Daytona Beach

- Police (386) 671-5100
- Fire/Rescue (386) 671-4000
- Solid Waste (386) 671-8670

City of Daytona Beach Shores

- Police (386) 763-5321
- Fire/Rescue (386) 763-5349
- Solid Waste (386) 763-5326

City of DeBary

- Police (386) 668-2040
- Fire/Rescue (386) 668-2040
- Solid Waste (386) 668-2040

City of DeLand

- Police (386) 626-7400
- Fire/Rescue (386) 626-7326
- Solid Waste (386) 626-7169

City of Deltona

- Police(386) 860-7030
- Fire/Rescue (386) 575-6901
- Solid Waste (386) 878-8100

City of Edgewater

- Police (386) 424-2000 option 3
- Fire/Rescue (386) 424-2000 option 6
- Solid Waste (386) 424-2476

City of Holly Hill

- Police (386) 248-9475
- Fire/Rescue (386) 248-9473
- Solid Waste (386) 248-9463

City of Lake Helen

- Police (386) 228-2145
- Fire/Rescue (386) 228-2121
- Solid Waste (386) 228-2121

City of New Smyrna Beach

- Police(386) 424-2000
- Fire/Rescue(386) 402-8275
- Solid Waste (386) 424-2205

City of Oak Hill

- Police (386) 345-3522
- Fire/Rescue (386) 345-3522
- Solid Waste (386) 345-3522

City of Orange City

- Police (386) 775-9999
- Fire/Rescue (386) 775-5460
- Solid Waste (386) 775-3333

City of Ormond Beach

- Police (386) 677-0731
- Fire/Rescue (386) 676-3255
- Solid Waste (386) 676-3230

Town of Pierson

- Police (386) 736-5999
- Fire/Rescue (386) 736-5940
- Solid Waste (386) 749-2661

Town of Ponce Inlet

- Police (386) 248-1777
- Fire/Rescue (386) 322-6720
- Solid Waste (386) 322-6729

City of Port Orange

- Police (386) 506-5870
- Fire/Rescue (386) 506-5900
- Solid Waste (386) 506-5577

City of South Daytona

- Police (386) 323-3568
- Fire/Rescue (386) 322-3033
- Solid Waste (386) 322-3080

DFS Storm Hotline (800) 227-8676

Directions to Shelters

- Volusia County (386) 734-7190 or (386) 943-7626
- Brevard County (321) 637-6670
- Marion County (352) 369-8100
- Flagler County (386) 586-5111
- Putnam County (386) 329-0379
- Lake County (352) 343-9732
- Seminole County (407) 665-0311

ESF-21

- Big Room Direct 386-258-4090 or ext. 11188
- IDAM ext. 14090
- AGIS ext. 11021

FEMA Assistance (800) 621-3362

Fish & Wildlife Conservation (888) 404-3922

 **Flagler County Hotline (386) 586-5111**

 **Florida Department of Health**

- Daytona Beach (386) 274-0500
- DeLand (386) 822-6215
- Deltona (386) 789-7507
- New Smyrna Beach (386) 424-2065

 **Florida State Assistance Line (800) 342-3557**

 **FPL Hotline 1-800-4-OUTAGE**

 **Humane Society**


- Halifax (386) 274-4704
- West Volusia (386) 734-2450
- Southeast (386) 428-9860

 **Natl Flood Insurance Program (800) 427-9662**

 **Natl Hurricane Center (Miami) (305) 229-4470**

 **Natl Weather Srv (Melbourne) (321) 255-0212**

 **Palm Coast Hotline (386) 986-2360**

 **Salvation Army (local) (386) 236-2020**

 **United Way First Call for Help**


- (386) 253-0563 Or 211

 **United States Coast Guard**

- Daytona Beach (386) 258-8733
- New Smyrna Beach (386) 428-9084
- National Response Center (800) 424-8802

 **United States Customs Service**

- Daytona Beach (386) 248-8043

 **Volunteer Opportunities**

- Vol County Citizen Corps (386) 258-4088

 **Volusia County Animal Control**

- Daytona Beach (386) 248-1790
- DeLand (386) 740-5241
- New Smyrna Beach (386) 423-3369

 **Volusia County Emergency Management**

- DeLand (386) 736-5980
- Daytona Beach (386) 258-4088
- Southeast Volusia (386) 423-3395

 **Volusia County Hotline (866) 345-0345**

 **Volusia County Schools**

- West Volusia (386) 734-7190 Ext. 20000
- Daytona Beach (386) 255-6475
- New Smyrna Beach (386) 427-5223
- New Smyrna Beach (386) 423-3395

 **Volusia County Sheriff's Office**

- Daytona Beach (386) 239-8276
- New Smyrna Beach (386) 409-8276
- Osteen (407) 323-0151
- West Volusia (386) 943-8276

 **Volusia County Solid Waste Information**

- Eastside (386) 947-2952
- Westside (386) 943-7889

 **VOTRAN**

- Daytona Beach (386) 322-5100
- West Volusia (386) 943-7050
- New Smyrna Beach (386) 424-6820

 **Weather Line Forecast Service**

- 24 hour line (386) 252-8000

Important Information

EMERGENCY 911

(Call 911 ONLY to report an emergency)

Flagler County Administration

386-313-4000

www.FlaglerCounty.org

Florida Hospital Flagler

386-586-2000

Poison Control:

(800) 222-1222

Florida Power and Light:

(800) 4-OUTAGE

FL Division of Emergency Management

www.floridadisaster.org

National Weather Service

www.weather.gov/JAX

Federal Emergency Management (FEMA):

www.Ready.gov or www.FEMA.gov

1-800-621-FEMA (3362)

OFFICIAL EMERGENCY PUBLIC INFORMATION

www.flaglercounty.org/emergency

386-586-5111

Local Radio (Flagler Broadcasting):

WNZF Radio – 1550 AM & 94.9 FM

TELEVISION:

FLAGLER COUNTY TV

SPECTRUM CABLE CHANNEL 492

ATT U-VERSE CHANNEL 99

PALM COAST TV

SPECTRUM CABLE CHANNEL 495

ATT U-VERSE CHANNEL 99

Report flooding, tree damage, wastewater, fallen power lines, street blockage or disrupted water supplies.



FLAGLER COUNTY EMERGENCY INFORMATION LINE

386-586-5111

FLAGLER COUNTY EMERGENCY MANAGEMENT

1769 East Moody Blvd., Bldg. #3, Bunnell, FL 32110

Phone: 386-313-4200 Fax: 386-313-4299

Email: EOC@FlaglerCounty.org

facebook.com/flaglereoc

www.flaglercounty.org/emergency



City of Palm Coast

160 Lake Ave. • Palm Coast, FL 32164

386-986-2360

facebook.com/discoverpalmcoast

www.palmcoastgov.com



City of Flagler Beach

105 S. Second St. • P.O. Box 70
Flagler Beach, FL 32136

386-517-2000

facebook.com/FlaglerBeachPolice

www.cityofflaglerbeach.com



City of Bunnell

201 W. Moody Blvd. • Bunnell, FL 32110

386-437-7500

facebook.com/BunnellFL

www.bunnellcity.us



Town of Beverly Beach

2735 N Oceanshore Blvd.

Beverly Beach, FL 32136

386-439-6888

www.mybeverlybeach.org



Town of Marineland

Department of Health

301 Doctor Cargter Blvd.

Bunnell, FL 32110

386-437-7350

flagler.floridahealth.gov



Flagler County Sheriff

901 E Moody Blvd.

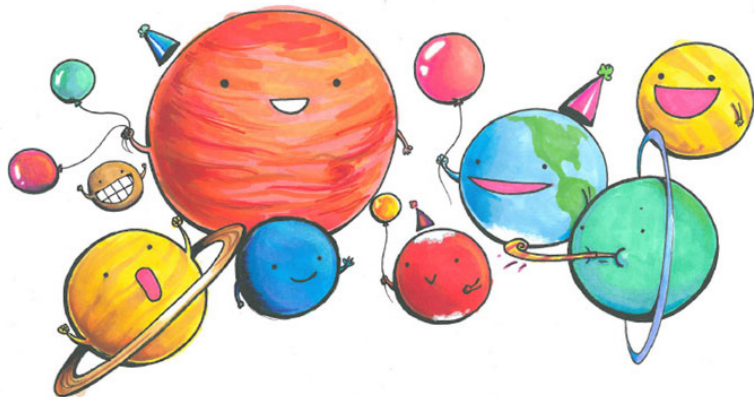
Bunnell FL 32110

386-313-4911

www.flaglersheriff.com



HOW DO YOU ORGANIZE A SPACE PARTY?



YOU PLANET.

ONLINE BRAIN & BODY TRAINING

Online Brain and Body Training for Alzheimer's, Parkinson's and Adults 50+

Total HealthWorks – an evidence-based virtual fitness platform created by the founders of Delay the Disease, the #1 Parkinson's group-exercise program in the country, is offering their Brain and Body Class **every Wednesday at 12:00 PM Noon EST via Zoom for FREE!**

Fill out the form on their website and receive a link in your email to join the online Brain and Body exercise class with Jackie Russell and David Zid. Visit their website to learn more: <https://totalhealthworks.com/free-online-class/>

Don't worry, if you can't join the class at the scheduled time, **you will receive a link in your email to watch the class whenever you'd like!**

REGISTER

Parkinson's in Movement with Andrew Carroll

Arts 4 All will be hosting 3 sessions of their Parkinson's in Movement Class - Wednesday's at 11 am (via zoom or in person at USF). You only need to register once for ALL 3 sessions.

Fall I: September 6, September 13 & September 27
Fall II: October 18, October 25, November 1 & November 8
Holiday: November 29, December 6 & December 13



REGISTER

PAGDB

PO Box 4193
Ormond Beach, FL 32175
386-871-3879

www.parkinsondaytona.org
parkinsondaytona@gmail.com

Board of Directors

Vince Kinsler

PAGDB Executive Director
yovinny57@aol.com

Alaine Keebaugh

Boston Scientific
Alaine.Keebaugh@bsci.com

Christina Atanasoski
PAGDB Admin & Designer

Ellen Lautner

elauturn1@gmail.com

Ken Sipes, CPA
Treasurer

Marianne Chapin

Rock Steady Boxing
mchapin130@gmail.com

Matt O'Malia

matthew.omalia@gmail.com

Nancy Dawson

ndawson0124@gmail.com

Ursula O'Leary

utrudeau@msn.com

NOTE: The information in this newsletter and the information provided by our speakers is not intended as medical advice. Please consult your physician before trying anything new or different.