PARKINSON News

Published by The Parkinson Association of Greater Daytona Beach (PAGDB)

Recent Gifts & Grants

♥ Anonymous Donor – Gift to PAGDB In Memory of Robert "Bob" Clawson
♥ Becky & Tex Lester – Matching Gift to PAGDB – Via YourCause
♥ Edith Woods – Gift to PAGDB in Memory of Jim Woods

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

In This Issue

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.

"Newly Developed Test Aids in Detection of PD & Other Syndromes"

Tuesday, March 15th, 2022 • 2:00pm-3:30pm

Bishops Glen Retirement Facility (Auditorium)
900 LPGA Blvd. Daytona Beach

Kenny Buchanan

One of the key areas of clinical interest in PD is in the research of the protein alpha synuclein, which has been deemed a common trait in the physiology of those that suffer with this syndrome. Recently, a new diagnostic test has been developed which has greatly enhanced the ability of the medical community to definitively identify this protein in individuals.

The PAGDB is pleased to welcome Kenny Buchanan with CND Life Sciences; the creator of the Syn-One Test™, the world's first commercially available test to detect and visualize abnormal alpha-synuclein in cutaneous nerve fibers. The test is an objective, evidence-based diagnostic tool to aid in the diagnosis of Parkinson's disease, dementia with Lewy bodies, multiple system atrophy, pure autonomic failure, or REM sleep behavior disorder.

We hope you plan on joining us for this interesting insight of this newly developed diagnostic test and its value to the medical community.

Reservations for this event are required, please register early for this event. To **register for this event in-person** please visit: https://www.parkinsondaytona.org/in-person-meetings, or click the red button below. **To register for online Zoom program please visit**: https://www.parkinsondaytona.org/online-meetings or click the green button below.

You may also register by **calling 386-871-3879. Please leave a message**

Register Online for In Person

Register for Zoom Event

OUR FIRST IN-PERSON MEETING IN TWO YEARS!

Our first in-person meeting in two years held on Tuesday February 15, 2022 at Bishops Glen was by any measure a Big Success! Approximately 30 people were in attendance in the live audience, and another 19 individuals participated on our Zoom platform. A debt of gratitude to goes out to Dr. Ramon Rodriguez for his excellent presentation "Moving Forward: Learning About Parkinson's Disease & How it Advances", the program sponsor Abbvie (makers of Duopa), and our host facility Bishops Glen – for providing such a beautiful facility for our meetings! We hope to see more of you all attending our live programs in the future.

New Year's Word Search

J A N U A R Y F R I E N A C E
F R I E N D S Y A S R I L A H
N E Y S E R T I E M O W B L C
B S I L Y F A E N E I Y A E O
N O C R N V N V E Y D L B N U
A L D C L O C K L T I E Y D N
R U V E W M I D N I G H T A T
V T O A S T W S N O L Y I R D
G I A N I N G S E V E U A R O
C O N F E T T I T M I N G S W
R N O L C E L E B R A T I O N
A J A N U E L V E I M K E R A
Y P A R T Y H A A P Y S E V W
N E W Y E A R C L O K S O R Y
S H A P P Y E B A L L R E S O

Word Search Answers

Were you able to find all the words in the New Year's Word Search from the January/February Newsletter?

Up for another challenge? See Page 6 for a Spring Word Search!

The History and Current Concerns of Enviornmental Impacts on PWP

Dr. Ryan Uitti
Neurologist at Mayo Clinic Jacksonville

TUESDAY, APRIL 19, 2022
2:00-3:30 PM

Who better to reinitiate these meetings than the ever-popular Dr. Ryan Uitti from the Mayo Clinic, Jacksonville Florida!

Dr. Uitti will be discussing **"The History and Current Concerns of Environmental Impacts on PWP".**

This program will be held on **Tuesday, April 19, 2022** at **Bishops Glen Retirement Community (Auditorium)** located at 900 LPGA BLVD. Daytona Beach, FL 32117 from 2:00pm-3:30pm. Refreshments will be served.

Space is limited for this event so please register early to secure your seat. **For more information on how to register see below.**

Can't attend the in-person event? No worries! **This program will also be simulcast live on Zoom.** See below for Zoom registration information.

Either way, you don't miss out on our first in person congregate meeting in almost two years – so register early – register now!

Register Online for In Person

Register for Dr. Uitti's Event Online

RSVP

IN-PERSON EVENT at Bishops Glen click here: https://www.parkinsondaytona.org/in-person-meetings or simply **call 386-871-3879 and leave a message with your name and how many will be attending.**

ONLINE ZOOM PROGRAM please click here: https://www.parkinsondaytona.org/online-meetings

The Zoom program link will be emailed on the reminder flyer a couple of days leading up to the event. The Zoom link will be sent to your email after registering online and will also be sent an hour before the program begins.

Parkinson Association of Greater Daytona Beach

New Studies Support a Critical Role for Alpha Synuclein in PD

Article Reprinted FR: WPC BLOG – Clinical Science [Updated 6/21/21] FR: June 22,2020

At the WPC 2019 in Kyoto, I was invited to give a Hot Topics lecture and to be part of the Poster Tour program to allow me to further discuss the work of my team with other delegates. Since that great event, we have published in May 2020 the two papers that were presented at WPC 2019.

The basic problem in Parkinson's disease (PD) is loss of dopamine-producing nerve cells in a region of the brain called the substantia nigra pars compacta (SNc). Everybody has a gradual loss of these dopamine-producing nerve cells as they age, but PD patients have lost more of them than other people. Why these cells die in PD is unclear, and the focus of much research. To answer these questions, research requires the use of a variety of animal models to study different aspects of the disease. An international group of German (B. Mollenhauer), qatari (O. El Agnaf), Spanish (M. Vila, MT Herrero, J Obeso) and French (P. Derkinderen, B. Dehay, E. Bezard) senior researchers teamed up to address fundamental questions regarding development of synucleopathies in non-human primates, a species which brain anatomy and physiology is close enough to human beings to allow direct translation.

In the first study published in May 2020 in Science Advances, we show that dopaminergic neurodegeneration can be induced in non-human primates by both, small and large aggregates of a-synuclein. In contrast, experiments in rodents, used in 85% of studies, show that small a -synuclein aggregates do not induce neurodegeneration.

The so-called protein, a -synuclein, has a central role in the development of PD. In 2014, we had showed that pathological forms of the a-synuclein protein present in the brain of deceased PD patients were capable of initiating a Parkinsonian-like pathological process in mice and primates. Using the same human aggregates, we now characterized the synucleinopathy in non-human primates, by comparing these human aggregates with fractions containing soluble and smaller a-synuclein aggregates.

To our biggest surprise, while these small a-synuclein aggregates did not produce any neuronal cell death in mice, non-human primates showed neurodegeneration after small aggregates injection, to the same extent of big aggregates.

These findings provide new information on how the disease is initiated and amplified, and shows that, in non-human primates, a small amount of singular a-synuclein aggregates is as toxic as larger amyloid fibrils, reinforcing the need for preclinical research in non-human primates. These results have dramatic impact upon search for disease modifying therapies as focusing upon rodent species only in our therapy development programs may simply ignore the diversity of synucleopathy-causing mechanisms.

The origin of misfolding trigger signal of a-synuclein remains a mystery. The research about the gut-brain axis emerged in 2003 when a neuroanatomists team led by Heiko Braak spotted a-synuclein inclusions within the enteric nervous system of people who had died with PD. They proposed a staging scheme in which α-synuclein pathology spread from the gut to the brain. However, the intestinal origin of PD has not been proved in nonhuman primates and the bidirectional travel of a-synuclein is still under investigation.

We (the international team) included that key question into our thorough investigations and have found additional evidence that brain alpha-synuclein can also travels down to the gut. The study, described in the May 2020 issue of Brain, offers a new invaluable primate data exploring the role of the gut-brain axis in the initiation and propagation of PD pathology.

We now show that extracted α-synuclein aggregates of brains of dead patients have the ability to initiate and extend the neurodegenerative process that typifies PD in mice and primates. Using the same human aggregates, this study shows that, not only α-synuclein spreads from the gut to the brain, but also travels from the brain to the gut. Understanding how the disease develops over time should open the door to the development and testing of new therapeutic approaches.

Although further experiments are necessary, the study also suggests that the transmission of α-synuclein pathology does not go through the vagus nerve as it was previously suggested. Instead, the results suggest a possible systemic mechanism, in which the general circulation would act as a route for long-distance bidirectional transmission of endogenous α-synuclein, strengthening the predictive role of a-synuclein as a biomarker.

The two papers are the first outcome of a large project including many international laboratories and WPC was the perfect platform to present these data which are now available to everyone, thanks to their publication in high profile journals. We are eager to come to WPC 2022 to present the next generation of ground-breaking data our consortium will likely produce by then.

Dr. Erwan Bezard, PhD is the Director of Institute of Neurodegenerative Diseases at the University of Bordeaux, France.

This research was first shared as an abstract at the WPC 2019 in Kyoto. WPC is pleased to support abstract authors by sharing their ongoing work.
Ideas and opinions expressed in this post reflect that of the author(s) solely. They do not necessarily reflect the opinions of the World Parkinson Coalition®

Parkinson's & Constipation Nutrition Study

If you have been diagnosed with Parkinson's and suffer from slight constipation symptoms, you may be eligible to participate in a research study.

The effect of a Mediterranean diet intervention to improve gut health in Parkinson's disease.

The UF Food Science and Human Nutrition (FSHN) Department is conducting a 10-week study to determine if the Mediterranean diet impacts gastrointestinal function of people diagnosed with Parkinson's disease who experience at least slight constipation symptoms.

You will be randomly assigned to follow a Mediterranean diet or receive standard of care for the intervention period.

During the study, you will complete daily and weekly questionnaires to assess bowel function, stress, quality of life, and dietary intake.

You will be asked to attend three (3), study visits after an overnight fast and provide stool samples at designated time points.

Participants will receive:

- Compensation upon completion of study procedures
- Light breakfast at study visits
- Diet education by a dietitian (RDN) followed by weekly phone calls

Location

- In-person appointments 3 times over 10-weeks at the UF FSHN Building in Gainesville, FL. Other study procedures will be conducted virtually and/or by phone

Are you eligible?

- 40-85 years old
- Diagnosed with Parkinson's disease
- Hoehn & Yahr Stage $\leq$ 2.5
- Experience at least slight constipation symptoms
- BMI $\geq$ 18.5
- No history of deep brain stimulation (DBS) or gastrointestinal condition
- Additional criteria will apply

If you're unsure if you meet the requirements, call, or email a member of the study team:

- Carley Rusch, MS, RDN, LDN
- Lead Research Dietitian
- nutrition-study@ufl.edu
- (352) 340-7321

If interested, please go to: https://tinyurl.com/MPDStudy or call (352) 340-7321

UF UNIVERSITY of FLORIDA

College of Agricultural and Life Sciences

Spring Word Search

C H I C K E J U N E G R W O W
H P U D D L E M A P R I L H S
I B L O H B U N N Y E B O M E
B A S E B A L L T T E U M A E
S U M A M A T C H A N T F R D
H O T S P R I C I N G T L C S
N E S T T A P I H E A F O H O
E G S G E T R A I N B O W L R
E G S S Y R E W S O L Y E E A
A S E H B U F N N S O L R S I
E G R O W O F L L Y O Y S S N
A N U W E F M A Y Y M V R O C
S A N E R A N B O W S H E S O
U M B R E L L A E A S T E R A
T H A S P R I N G P U D D E T

APRIL
BASEBALL
BLOOM
BUNNY
BUTTERFLY
CHICK
EASTER
EGGS
FLOWERS
GREEN
GROW
HATCH
JUNE
MARCH
MAY
NEST
PASSOVER
PUDDLE
RAINBOW
RAINCOAT
SEEDS
SHOWERS
SPRING
UMBRELLA

CRAYONSANDCRAVINGS.COM

Diets high in flavonoids may help people with Parkinson's live longer

• Researchers recently showed that a diet rich in flavonoids — compounds present in brightly colored foods such as blueberries, strawberries, red wine, and tea — reduces mortality in people with Parkinson's disease.
• In the new study, after a diagnosis of Parkinson's disease, affected individuals lived longer when they added flavonoid-rich foods into their diet.

In the Journal NeurologyTrusted Source, researchers from Penn State University, Harvard, and Queens' University in Belfast, Northern Ireland, leveraged data from two long-range studies — the Nurses Health Study (NHS) and the Health Professionals Follow-up Study (HPFS) — to analyze the effects of diet on longevity in individuals with Parkinson's disease (PD).

Specifically, researchers chose to examine the effect of flavonoidsTrusted Source on mortality in PD patients. Flavonoids are plant-derived molecules found naturally in fruits, vegetables, and common beverages such as tea and red wine.

The metabolites of flavonoids can cross the blood-brain barrier Trusted Sourceand have been demonstrated to reduce oxidative stress, inflammation, and the hardening of the arteries, known as atherosclerosis.

Flavonoids and neurodegenerative conditions

These special molecular functions give flavonoids neuroprotective properties. In the central nervous system, flavonoid metabolites bind to receptors in the brain that controlTrusted Source sedation, anxiety, and can even treat seizure risk. They also can bind monoamine oxidase receptor B, an important pharmaceutical targetTrusted Source for reducing the symptoms of PD. For this reason, flavonoids have been of great interest to clinician-researchers treating neurodegenerative diseases such as PD or Alzheimers' disease.

The current study is informed by the researchers' prior work in 2012, which found that the risk of developingParkinson's disease in men was reduced by 40% when they consumed diets high in flavonoids.

Medical News Today asked study author Dr. Xiang Gao, MD, Ph.D., professor of Nutrition Sciences at Penn State University, if there was a lower incidence of PD in countries where diets are high in flavonoids, such as in Mediterranean climates. He replied:

"There is no such clear pattern. However, in our previous study, we observed that dietary patterns with a high intake of fruit, vegetables, legumes, whole grains, nuts, fish, and poultry and a low intake of saturated fat, and a moderate intake of alcohol may protect against PD."

Dr. Gao and his colleagues report that people living with PD have higher mortality rates than individuals with diabetes, colorectal cancer, ischemic heart disease, or chronic obstructive pulmonary disease.

MNT asked Dr. Natalie Diaz, a board-certified neurologist at the Pacific Movements Disorder Center at Providence Saint John's Health Center in Santa Monica, CA, about this higher mortality risk in PD patients. She explained:

"There are some studies that show maybe slightly higher risk and other studies have gone all the way to say that they have twice or double the risk, as opposed to people with other chronic diseases […] We also see a great reduction in some of these other chronic diseases over the years."

"So, cancer risk, stroke risk, all are going down significantly, whereas maybe, the risk of Parkinson's is going up. We are seeing more and more Parkinson's disease in the general population […] and less and less of these chronic disorders."

What the new study found

Studying 1,251 individuals from the NHS and HPFS studies, Dr. Gao and his colleagues measured the proportions of intake from foods such as apples, blueberries, strawberries, tea, oranges, and red wines.

They were able to measure the dietary intake of these individuals for 32–34 years until their death or the end of the study. To reduce the bias that living with PD might cause, due to changes in dietary intake as a sequela of the disease, the scientists quantified foods high in flavonoids before and after the participants' diagnosis of PD.

Dr. Gao and his colleagues discovered two important results:

Participants with PD who ate diets high in flavonoids prior to their diagnosis had lower mortality from all causes.
Participants who began high-flavonoid diets after PD diagnosis demonstrated lower mortality rates.
For MNT, Dr. Gao explained:

"Flavonoids are naturally occurring, plant-based dietary components, rich in fruit and vegetables. They give various colors to these plants. Adapting a healthy dietary pattern, high in colorful fruit/veggies (eg., berry fruits), ever after Parkinson's diagnosis, could slow disease progression and improve survival rate."

Lifestyle changes could slow PD progression

MNT asked Dr. Diaz if she made dietary recommendations to people living with PD. She replied:

MNT asked Dr. Gao what, in his opinion, is the most important development or new learning in the management of Parkinson's' disease.

Dr. Gao replied: "Adopting a healthy lifestyle, such as physical activity and [a] healthy dietary pattern with high intakes of colorful fruit and vegetables. A large number of studies also support the potential neuroprotective effects of coffee and tea."

Regarding advising individuals living with PD, Dr. Diaz told MNT:

"Patients want to be able to feel that they have some ownership to change the trajectory of their disease — not just rely on medication. So, I go over the literature with them. These are all associations — we haven't been able to see causality, per se, but […] lifestyle changes could potentially [p]oint to changes in how their disease course goes and complications over the years."

Dr. Gao's results, with his collaborators, affirm proactive dietary interventions improve outcomes in people living with PD.

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https://www.medicalnewstoday.com/articles/diets-high-in-flavonoids-may-help-people-with-parkinsons-live-longer

Low-Sugar, High-Protein Lemon Blueberry Protein Muffins

INGREDIENTS

2 tablespoons flaxmeal
6 tablespoons water
1 teaspoon apple cider vinegar
1 cup unsweetened soy milk
1 1/2 cups white whole wheat flour
2 scoops vanilla protein powder
2 teaspoons baking soda
1/2 teaspoon salt
1/2 cup organic sugar
1/3 cup canola oil
Juice from one lemon (about 3 tablespoons)
2 teaspoons pure lemon extract
1 teaspoon vanilla extract
1 1/4 cups blueberries (fresh or frozen)

Blueberries are high in Flavonoids!

DIRECTIONS

Preheat oven to 350°F. Line two 12-muffin pans with 15 paper liners.
In a small bowl, mix the flaxmeal with the water and set aside.
In another small bowl, whisk together the apple cider vinegar and the unsweetened soy milk and set aside.
In a large bowl, combine the flour, protein powder, baking soda, salt, and sugar.
Mix in the oil, lemon juice, lemon extract, vanilla extract.
Stir in the flaxseed mixture as well as the vinegar/soy milk mixture.
Fold in the blueberries.
Divide the batter among the 15 muffin cups and bake for 25 minutes.

Exercise and physical activity can improve many motor and non-motor Parkinson's symptoms:

Aerobic Activity

3 days/week for at least 30 mins per session of continuous or intermittent at moderate to vigorous intensity

TYPE: Continuous, rhythmic activities such as brisk walking, running, cycling, swimming, aerobics class

CONSIDERATIONS: Safety concerns due to risks of freezing of gait, low blood pressure, blunted heart rate response. Supervision may be required.

Strength Training

2-3 non-consecutive days/ week for at least 30 mins per session of 10-15 reps for major muscle groups; resistance, speed or power focus

TYPE: Major muscle groups of upper/lower extremities such as using weight machines, resistance bands, light/moderate handheld weights or body weight

CONSIDERATIONS: Muscle stiffness or postural instability may hinder full range of motion.

Balance, Agility & Multitasking

2-3 days/week with daily integration if possible

TYPE: Multi-directional stepping, weight shifting, dynamic balance activities, large movements, multitasking such as yoga, tai chi, dance, boxing

CONSIDERATIONS: Safety concerns with cognitive and balance problems. Hold on to something stable as needed. Supervision may be required.

Stretching

>2-3 days/week with daily being most effective

TYPE: Sustained stretching with deep breathing or dynamic stretching before exercise

CONSIDERATIONS: May require adaptations for flexed posture, osteoporosis and pain.

Collaborative Study with

UF's Institute for Mobility, Activity and Participation,

Norman Fixel Institute for Neurological Diseases,

and UF's Industrial and Systems Engineering

Participants Needed
Drivers with Parkinson's Disease & Autonomous Vehicle Technologies

Study Purpose:

Test new car technologies (adaptive cruise control, lane departure warning and blind spot monitor) to see if they help drivers with Parkinson's Disease manage certain driving tasks.

Who can participate?

- Persons diagnosed with Parkinson's Disease
- Age 35-85
- Active driver with valid license
- Live independently in the community

Location – Fixel Institute and Gainesville

- Half-day session
- Questionnaires about technology
- Tests of vision, cognition and motor function related to driving
- Information on vehicle technologies:
  - In-vehicle Information Systems
  - Advanced Driver Assistance Systems

Compensation provided.

2019 Toyota Camry XLE

Adaptive Cruise Control

Lane Departure Warning

Blind Spot Monitor

Contact us at 352-273-7486

- Mention the Parkinson's disease study
- Get more information
- Find out if you can participate

UF College of Public Health and Health Professions
Department of Occupational Therapy
UNIVERSITY of FLORIDA

UFHealth NORMAN FIXEL INSTITUTE FOR NEUROLOGICAL DISEASES

UF Herbert Wertheim College of Engineering
UNIVERSITY of FLORIDA

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. **Click the button to be taken to their registration page or 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

DANCE for PD®

CLASSES | TRAINING | RESOURCES

For those that wish to continue to participate in a regular Dance for PD program with local Dance for PD instructor Gabriela Trotta – these classes are now **offered online every Monday at 1:30pm** – it's easy to register and participate and it's **FREE** to all PAGDB Members!

To find out how to connect with our live online Dance for PD program please contact **Gabriela at 386-405-6905 or email her at: gabriela59@aol.com or Nicole at nmante86@gmail.com.**

Gabriela & Nicole will be happy to help you get started.

SO GET OUT AND DANCE!

**Other than provide financial support for its members that wish to participate in this Dance for PD program, the PAGDB has no ownership stake nor controls any of the program content. PAGDB members that wish to participate do so at their own risk. Always consult with your doctor before you engage in any type of exercise program.

WEBINAR VIDEOS

All of our previous webinars in our You, Me & PD series are available on Youtube and our webiste! To visit our YouTube channel you can search for it by visiting www.youtube.com. In the search box search for: Parkinson Daytona. You will find our 'channel' and all of our uploads. You can subscribe to follow us and be shown future uploads. We also have all the webinar videos on our website under the 'Events' tab. Visit our webiste www.parkinsondaytona.org or click here to visit our YouTube channel.

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