Sixth Annual
Onondaga County Conference

Living An Active Life with Parkinson's Disease

Thursday, October 11, 2018
Holiday Inn
441 Electronics Parkway
Liverpool, New York 13088

This Education Guide is Provided Through the Generosity of ACADIA Pharmaceuticals
Helping to make our community extraordinary.

From assisted living to short-term rehabilitation, Loretto has been doing extraordinary things for the people in this community for nearly 100 years. And our dedication doesn’t stop there. We also have a proud history of supporting organizations that work so hard to improve lives right here at home. Visit lorettoctny.org to see how Loretto is dedicated to making every day extraordinary.

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www.syracusesenior.com
Marlene F. Reinmann - Conference Chair
Roseanne Suskin - Co-Chair

Conference Schedule

7:30 - 8:00  Exhibitor Check-In and Set-Up

8:15 - 9:00  Early Bird Exhibitor Viewing and Check-In

9:00 - 9:15  Welcome
Susan M. Kennedy, Conference Host, Freelance Journalist, Media Strategist and Communication Specialist, Reporter for Advance
Peter J. Headd, Executive Director Onondaga County Office for Aging
Cynthia Woods, Executive Director Upstate Medical University’s OASIS and HealthLink

9:15 - 9:45  Redefining Your Diagnosis
Pages 19-25
Sarah King, PT, DPT, Owner and Physical Therapist of Invigorate Physical Therapy and Wellness

9:45 - 10:45  The Gut-Brain Connections in Parkinson’s Disease
Pages 26-48
Michelle Burack, MD, Neurologist University of Rochester Medical Center

10:45 - 11:30  Community Resource Education Session
Conference Schedule Continued

11:30 - 12:00  Psychological Issues with Parkinson’s Disease
Pages 49-60
Fahed Saada, MD, Neurologist
St. Joseph’s Hospital Health Center

12:00 - 12:45  Lunch

12:45 - 1:15  How to Build Your Parkinson’s Plan of Attack
Pages 61-78
Sarah King, PT, DPT

SO LET’s GET MOVING!

1:15 - 2:00  Exercise is Medicine Workshop
Pages 79-86
Sarah King, PT, DPT

2:00 - 2:15  Goodbye and Keep Moving!

We appreciate the enhanced audio and visual services provided by David Foor and Visual Technologies.

Visual Technologies 315-423-2000
www.visualtec.com
Many Thanks To:

This Conference Would Not Be Possible Without the Dedication of Chair, Marlene Reinmann and Co-Chair, Roseanne Suskin & Onondaga County’s Director of Caregiver Services, Cynthia Stevenson

A Special Thanks To:
Marty Pond, Conference Planning Committee
Ellen McCauley, Editor Education Guide, OFA
Cherry Lamb, Logistics Coordinator, OFA
Volunteers
Presenters

Onondaga County Office for Aging
www.ongov.net/aging
Many Thanks To:

Thank you to son of Dan Riley, **Evan Riley**, Musician, Composer, Band Leader, Performer, and his supporters for the contribution from his “Punch Out Parkinson’s” Golf Tournament and Concert event in Wisconsin to our Syracuse Conference.

https://evanrileymusic.com/punch-out-parkinson-s-golf-outing

**“Finding Your Way With Parkinson’s Disease”**

**Group Facilitators and Host Sites**

With appreciation and gratitude we honor the dedicated commitment of those who each month faithfully facilitate the regular group meetings and to the host sites that so graciously welcome our persons with Parkinson’s disease and their care partners.

- **Linda Pekarsky**   Brookdale Summerfield
- **Cynthia Stevenson**   The Hearth at Greenpoint
- **Marty Pond**   The Nottingham
A Gracious Thank You to Our 2018 Community Supporters
Please Visit Their Resource Tables

Acadia
Acadia’s history is rooted in science and strong leadership in central nervous system (CNS) research. Since the beginning, they have been dedicated to improving the lives of patients suffering from CNS disorders. Brian Kalfass, Exec. Neuro Science Sales Specialist, 315-430-0181, bkalfass@acadia-pharm.com

Adamas Pharmaceuticals, Inc.

Alzheimer’s Association, CNY
Provides care and support to all who are affected by Alzheimer’s disease or other forms of dementia. They accelerate research across the globe and advocate for the needs and rights of those facing Alzheimer’s disease. 315-472-4201 Ext. 107, Martha Hutchinson.

At Home Independent Living
Non-Medical Companion, Homemaking Service & Escorted Transportation to Medical Appointments. 315-579-4663 Ext. 100, Dean Bellefeuille.

Brewerton Pharmacy

Caring Transitions of Syracuse
A solutions company. They proudly assist families across CNY with transition assistance both for people moving or aging in place. Services includes: decluttering, move management, estate liquidation and home clear-outs. 315-401-7633, Jennifer and Mike Novak, Managing Owners.
A Gracious Thank You to Our 2018 Community Supporters
Please Visit Their Resource Tables

Dignity Plus
Is a licensed Home Health Care Agency who’s goal is to provide quality in-home care to our clients while maintaining their respect, independence and dignity. 315-668-9381, Chad Penoyer.

Franciscan Companies
Home & Community based care including Lifeline, licensed home care, medication dispensers and durable medical equipment. 315-458-3600, Stacey Gingrich.

Hearth Managed Senior Living Communities

Impax
Impax is an integrated specialty pharmaceutical company focused on developing, manufacturing, and marketing generic and specialty pharmaceutical products. They apply their formulation and drug delivery expertise to the development of solid oral dose and specialty generics in addition to the development of central nervous system disorder branded products. Donald Peterson, 315-450-3438, Donald.peterson@impaxlabs.com.

Inspire Care of CNY
Is an aging life care and home physical therapy company that assists older adults and families to plan, manage, assess, monitor, advocate and problem solve for the best life plan. They provide personal and compassionate professionals who know what you need, whether family members live close or far away. 315-447-3164, Becky Auyer, PT, CMC.
A Gracious Thank You to Our 2018 Community Supporters
Please Visit Their Resource Tables

Invigorate Physical Therapy & Wellness
Austin's only 100% Parkinson's specialized physical therapy practice. Their mission is to help clients build a personalized Parkinson's Plan of Attack that guides them towards the very best version of themselves, despite their diagnosis, so they can return to doing the things they love. Dr. Sarah King, PT, DPT. 512-361-1213, www.invigoratept.com.

Jewish Community Center of Syracuse (JCC)
The JCC is all about families coming together with the community. They offer programs for infants, toddlers, kids, teens, adult and seniors. They also have a fully equipped fitness center. Patrick Scott, 315-234-4522.

Loretto
Is a comprehensive, continuing healthcare organization which provides a variety of services for older adults throughout Central New York. Formed in 1926, Loretto transforms elder care by deinstitutionalizing nursing homes and long-term care services, and replacing them with home settings utilizing person-first care. The comprehensive system of care serves close to 10,000 individuals each year through 19 specialized programs in Onondaga and Cayuga counties. 315-413-3564, Noreen Longden.

Lundbeck
Is a global pharmaceutical company specializing in psychiatric and neurological disorders. For more than 70 years, they have been at the forefront of research within neuroscience. Their key areas of research focus are depression, schizophrenia, Parkinson's disease and Alzheimer's disease. In the U.S., Lundbeck employs nearly 1,000 people focused solely on accelerating therapies for brain disorders. With a special commitment to the lives of patients, families and caregivers, Lundbeck US actively engages in hundreds of initiatives each year that support their patient communities. Timothy Smallwood, 716-609-3774, tsma@lundbeck.com.
A Gracious Thank You to Our 2018 Community Supporters
Please Visit Their Resource Tables

Medtronic
Is among the world’s largest medical equipment development companies. One of its premiere products is Deep Brain Stimulation (DBS) for Parkinson’s Disease. Deirdre Hall, 585-314-1344, deidre.hall@medtronic.com.

McHarrie Life Senior Community
Is a continuum of care that offers independent, assisted living, memory care, skilled nursing/rehab and Long Term Care living for seniors. 315-638-2521. Maggie Reap, Administrator Assisted Living McHarrie Pointe.

OASIS Upstate Medical University CDSMP Program - Chronic Disease Self Management Program (Living Healthy With a Chronic Condition)
The purpose of the Chronic Disease Self-Management Program Workshop is to enhance one’s skills and ability to manage his or health and maintain an active and fulfilling lifestyle. Participants are invited to bring a family member, friend and/or caretaker. The program is FREE and available for anyone living in Onondaga County. 315-464-4827, Lisa Vigliotte-Bane.

Onondaga County Office for Aging (OFA)
Offers services both in the community and in the homes of seniors who live in Onondaga Count and is a focal point for information related to healthy living and/or care in the home. The OFA helps seniors and their caregivers to get the services they need and provides services directly as well as through partnerships with local community-based organizations. Ellen M. McCauley, Public Information Specialist, 315-435-2362 Ext. 4942.

Parkinson Foundation Greater Rochester
Is dedicated to making life better for people with Parkinson’s disease by improving care and advancing research toward a cure. They provide a variety of support groups, education programs and respite grants throughout the greater Rochester area. 100 Elmwood Ave., Rochester, NY 14620. For information contact: 585-234-5355, 800-327-4545.
A Gracious Thank You to Our 2018 Community Supporters
Please Visit Their Resource Tables

Parkinson’s Moving Day
Moving Day is an annual fundraising walk event hosted by the Parkinson’s Foundation. It is a fun and inspiring fundraising event that unites families, friends and communities both large and small in the fight against Parkinson’s disease. This celebration of movement features a family friendly walk course, a kids area, a caregivers relaxation tent and a special Movement Pavilion featuring yoga, dance, Tai Chi, Pilates, etc., all proven to help manage Parkinson’s symptoms. It is ‘A day to move, a day to move others, a day that moves YOU!’

Sunday, June 2, 2018, Onondaga Community College. Check-in 9:00 am, Walk starts at 11:00 am. Contact Kim Collins, 585-234-5355, kcolins@parkinson.org.

Peregrine Senior Living Onondaga Hill
Enhanced assisted living for residents with memory issues; providing a higher level of care.
Cherry Stonecipher, 315-469-8900.

Rock Steady Boxing Syracuse
A boxing fitness program to address functional deficits brought on by Parkinson’s Disease.
Pat Van Beveren, 315-729-7178.

Rock Steady Boxing CNY
Rock Steady Boxing is a fitness program using NON CONTACT boxing training techniques, designed for persons with Parkinson’s Disease to target a variety of symptoms. 315-622-2332, Jeannette Riley, Coach.

Senior Home Care Solutions
Designs and maintains an on-going, detailed care plan that provides the right level of interaction and independence for your loved one. They provide engaging activities and social outings based on individual needs and wishes. Their employees are educated, experienced, bonded, insured, background checked and have a passion for seniors. Sheila Ohstrom, 315-469-1000.
A Gracious Thank You to Our 2018 Community Supporters
Please Visit Their Resource Tables

Silver Fox Senior Social Club
A therapeutic environment for individuals needing social personal care as well as peace of mind and respite for caregivers. Barbara Deptula, 315-635-5335.

Upstate Medical University Department of Neurology
The Movement Disorders Program of the Department of Neurology at Upstate Medical University offers comprehensive care for a variety of movement disorders. Their areas of clinical interest include Parkinson's disease, tremor, dystonia, tics, Huntington's disease, and other movement disorders. They offer specialized treatment with botulinum toxin injections for dystonia and spasticity as well as a movement disorders surgical program that offers Deep Brain Stimulation (DBS) for patients with Parkinson disease, essential tremor and dystonia. Their movement disorders team is a collaboration of a collection of health care disciplines to provide comprehensive care. Dr. Sulada Kanchana, 315-464-8668.

US World Meds
Is a specialty pharmaceutical company that develops, licenses and brings to market unique healthcare products designed to improve the lives of patients with challenging medical conditions and unmet medical needs. Tom Robb, 315-382-7511, trobb@USWorldmeds.com.

NYS Monthly Calendar of Parkinson’s Events
http://cdparkinsons.org/
Please contact Marie Thorne, Editor, 518-810-8483, to list any New York State Parkinson’s Programs/Events/News.
Onondaga County Office for Aging

Finding Your Way With Parkinson’s Disease Support and Education Groups

Approximately 60,000 people are diagnosed with Parkinson’s Disease every year. As with any diagnosis, understanding your disease is key to successfully maintaining the meaningful activities of your daily life.

Join other patients and families, dealing with Parkinson’s Disease, to find and give support, learn from others and to hear informational presentations.

Where: The Hearth at Greenpoint
150 Old Liverpool Road, Liverpool

When: First Monday of each month, 12:00 - 1:30 pm
Or

Where: Brookdale Summerfield
100 Summerfield Village Lane, Onondaga Hill, off Velasko Rd.

When: Second Tuesday of each month, 4:00 - 5:30 pm
Or

Where: The Nottingham
1301 Nottingham Road, Jamesville

When: Third Thursday of each month, 2:00 - 3:30 pm

For information or to sign-up, call Cynthia at:
(315) 435-2362 ext.4993, or email at cstevenson@ongov.net
**Parkinson’s Support and Education Groups**

**Jefferson County**

**Chaumont Parkinson’s Support Group**

Every Tuesday at 11:00 a.m.
All Saints Church, Chaumont, NY
Exercise, pot luck lunch, speaker or activity, art class
Wednesdays - T’ai Chi in Watertown

For information contact: Clare Anthony at 315-788-3766
Janeen May at 315-649-5777

**North Country Coalition for Parkinson Disease and Movement Disorders**

“Success Is Touching One Person’s Life Today - Improving It For Tomorrow”

Second Wednesday of each month at 1:30 pm
St. Andrew's Parish Center, Sackets Harbor, NY

For information contact:
Norman Hunneyman at 315-646-3446
North Country Coalition for Parkinson Disease and Movement Disorders
PO Box 572, Sackets Harbor, NY 13685

**Madison County**

**Parkinson’s Support Group of Madison County**

Fourth Tuesday of each month from 12:30 - 3:00 p.m.
Jim Marshall Farms Foundation, Inc.,
1978 New Boston Road, Chittenango, NY

For information contact: Martha at 315-655-3796
Parkinson’s Support and Education Groups

Monroe County and Surrounding Areas

Parkinson Foundation Greater Rochester

100 Elmwood Ave., Rochester, NY 14620
For information contact: 585-234-5355, 800-327-4545
www.parkinson.org/greaterrochester
Parkinson Foundation Helpline 800-4PD-INFO (473-4636)

Oneida County

Central New York Parkinson Support Group, Inc.

Third Tuesday of each month at 12:30 p.m. - meet and greet
1 - 3:00 p.m. - program/speaker

Presbyterian Home
4290 Middlesettlement Road, New Hartford, NY 13413
For information contact: Rose Marie Taylor at 315-797-7500

Onondaga County - See Page 11.

National Parkinson’s Disease Foundations

Parkinson’s Foundation
www.parkinson.org 800-457-6676

Michael J. Fox Foundation for Parkinson Research
www.michaelfox.org 800-708-7644

Davis Phinney Foundation
www.davisphinneyfoundation.org 866-358-0285
The Movement Disorders Program of the Department of Neurology at Upstate Medical University offers comprehensive care for a variety of movement disorders. Our areas of clinical interest include Parkinson's disease, tremor, dystonia, tics, Huntington's disease, and other movement disorders. We offer specialized treatment with botulinum toxin injections for dystonia and spasticity as well as a movement disorders surgical program that offers Deep Brain Stimulation (DBS) for patients with Parkinson disease, essential tremor and dystonia. Our movement disorders team is a collaboration of a collection of health care disciplines to provide comprehensive care.

THE UPSTATE MOVEMENT DISORDER TEAM

Neurology
Dr. Su Kanchana, MD, PhD, Dr. Dragos Mihaila, MD, Brenda Schader, MS, RN, CS-FNP. For Neurology appointments 315-464-4243. For Dr. Kanchana's appointment 315-464-2469.

Neurosurgery
Dr. Gaddum Duemani Reddy, MD, PhD. For Neurosurgery appointments 713-464-6379.

Rehabilitation Medicine
Bethany Hetrick, MS, CCC-SLP. is Speech therapist, LSVT LOUD certified, and has worked in long-term care, short-term rehabilitation, and acute care settings.

Julie Lombardi, PT, DPT is a physical therapist in the outpatient department at Upstate Medical University. She enjoys working with patients with Parkinson's Disease as well as with dizziness. She is a certificated LSVT BIG therapist and Rocksteady Boxing coach. She also has certifications of competency in vestibular therapy.

Olivia Wattles, PT, DPT is a physical therapist in Upstate's outpatient neuro department. She is LSVT BIG certified and is a Certified Brain Injury Specialist. She enjoys working in neuro rehab and runs a support group for those with spinal cord injuries.

To make a physical therapy, occupational therapy, or speech therapy appointment please call (315) 464-6543.
Susan M. Kennedy is a freelance journalist, media strategist & communications specialist. She currently reports for Advance Media New York’s “The Good Life - Central New York” lifestyle magazine.

Kennedy was the founding host and producer of WCNY-TV’s “Cycle of Health.” From 2012-2017, she produced, reported and anchored programs featuring stories of compassion and hope from people seeking to improve their health.

From 2008 through 2010, Ms. Kennedy was the founding producer and on-air host for the public policy focused “Tempo Public Square” series on WLVT-TV PBS in Bethlehem, PA.

Ms. Kennedy worked previously as an anchor, producer, reporter, news writer and media strategist in various cities including WMAQ-TV NBC in Chicago, IL, WQAD-TV CBS in Moline, IL, and WWTV-WWUP-TV CBS in Cadillac, MI.

Susan received her Bachelor of Journalism from the University of Missouri, Columbia, School of Journalism.

She volunteers as an event host for various community organizations, enjoys tennis & golf, and resides with her family in Manlius, NY.
Speakers of the Day

Michelle Burack, MD

Michelle Burack, MD PhD received her PhD in Neuroscience from University of Virginia and completed her medical training, including neurology residency and fellowship in movement disorders and dementia, at Washington University in St. Louis.

She joined the University of Rochester’s Department of Neurology in 2007, serving as the Clinical Director of the Deep Brain Stimulation program from 2013 until this past July. She is currently in a part-time teaching role, stepping back from clinical practice to focus on her family. She remains actively involved in the Parkinson Foundation of Greater Rochester as a board member and member of the education committee.
Speakers of the Day

Dr. Sarah King, PT, DPT

Dr. King is the owner of “Invigorate Physical Therapy and Wellness” in Austin, Texas. The goal of her private practice is to help clients establish a comprehensive and personalized “Parkinson’s Plan of Attack” to refine their diagnosis and return to the life they love. Her practice is 100% specialized for clients with Parkinson’s disease whom she serves through one-to-one or on-line programs including Parkinson’s specific exercises, nutrition counseling and wellness strategies to maximize brain health and healing potential.

Dr. King received her Doctorate in Physical Therapy from Texas State University in San Marcos, Texas and her Bachelor of Science degree in Exercise Science from Truman State University in Kirkville, Missouri. In addition, she is a Parkinson’s Wellness Recovery Therapist, an extension of LSVT LOUD and BIG programs. She is a member of the American Physical Therapy Association and Texas Physical Therapy Association.

In 2006, she co-founded the NeuroCollaborative which offers space for fellow rehabilitation professionals to gather, collaborate, learn and grow.
Speakers of the Day

Fahed A. Saada, MD

Dr. Fahed Saada practices as a neurohospitalist at St. Josephs Hospital Health Center. He is certified by the American Board of Psychiatry and Neurology, Clinical Neurophysiology, the American Board of Electrodiagnostic Medicine, and the American Board of Psychiatry and Neurology and a member of the American Academy of Neurology.

Dr. Saada is an outgoing, dedicated, and energetic neurologist with a combination of outpatient and inpatient experience with a keen interest in stroke, epilepsy, and neuromuscular disorders. His strengths include diagnosis and follow-up, hands-on experience in performing lumbar puncture, electromyogram and nerve conduction studies, interpretation of electroencephalogram, and administration of tPA. His goal is to provide excellent patient care and improve neurological outcomes in underserved communities. In 2015, he was honored with the Louis S. Russo “Award for Outstanding Professionalism in Medicine” and the American Academy of Neurology “Resident Scholarship Award.”

In addition to his medical practice, Dr. Saada is the author of several peer reviewed articles, continues research in neurological disorders and presents at professional meetings and conferences. Dr. Saada received post graduate degrees of Doctor of Medicine from St. Matthew’s University School of Medicine and BBA/MBA in Health Studies from Davenport University. He has completed postdoctoral studies at Cleveland Clinic Fairview Hospital, University of Florida College of Medicine and, most recently, at the University of Rochester Medical Center where he was recognized with the “Neurology Fellow Teaching Award” in 2016.
Redefining Your Diagnosis

Sarah King, PT, DPT
Redefine Your Diagnosis
Dr. Sarah King, PT, DPT

A Letter to My Clients

(VIDEO)
https://youtu.be/qlnCBcQDCRk

Find it at:
www.InvigoratePT.com/blog//a-letter-to-my-clients
Hi there! I'm Sarah King, Parkinson’s physical therapist and founder of Austin's only 100% Parkinson's specialized physical therapy practice, Invigorate Physical Therapy and Wellness.

At Invigorate, my mission is to help my clients build a personalized Parkinson's Plan of Attack that guides them towards the very best version of themselves, despite their diagnosis, so they can return to doing the things they love.

If that resonates with you, you're in the right place. This conference will be an incredible place for you to find information and support as you travel along your Parkinson's journey, and I can't wait to be a part of that experience.

If you'd like to learn more about my practice, and how I help my clients create their own Parkinson's Plan of Attack, you can visit www.InvigoratePT.com/our-approach.

I also offer two online programs that you are welcome to learn more about below.

The Parkinson's Plan of Attack 30-Day Workshop
- This is for anyone diagnosed with Parkinson's who feels uprooted, frustrated, lost or overwhelmed by all the information out there about how to holistically approach their Parkinson's diagnosis.

- I created a 30-day online workshop that gives you daily, quick-hitting videos (10-15 minutes) that walk you through how to start constructing your own Plan of Attack.

- We cover mindset, exercise, nutrition, supplements, "alternative medicine", medication, and more. All in bite-size chunks that pairs with a Workbook to help you keep track of information and resources.

This program is the foundation of what I've been doing with my 1-on-1 clients for years. I've seen the liberation that comes from knowing exactly what to do, when to do it, and why and I'd love for you to experience too.

Learn more: www.InvigoratePT.com/Plan
The 5-Week Booster Boot Camp

- Designed specifically for your Parkinson's symptoms, this video-based, online exercise program is fun, challenging, and comes with a private online support group (led by myself) to help you stay accountable and get results.

- No equipment is required (except a set of home-made walking poles) and it can be done on your own time and schedule.

- We've had 350+ "Boosters" complete the program, and many repeat the program (you have lifetime access) with amazing results. (think: return to hiking, running, dancing, gardening, bike riding, and even water skiing.)

If you're looking to start a regular exercise routine that boosts your flexibility, strength, stamina, coordination, and balance, this is a great place to start.

>> Learn more: www.InvigoratePT.com/Booster

Thank you for trusting me on your Parkinson's journey!

Keep Moving & Big Hugs,

Dr. Sarah King, PT, DPT
di·ag·nose
dīəgˈnös/
1. identify the nature of (an illness or other problem) by examination of the symptoms.

de·fine
dəˈfīn/
1. mark out the boundary or limits of.

Ego says,
“Once everything falls into place, I’ll feel peace.”

~Marianne Williamson
re·de·fine
rēˈdīn/ 1. define again, differently.

di·ag·no·sis
dīəˈgōnəs/ 1. the distinctive description of the nature or features of someone in precise terms.

Ego says,
“Once everything falls into place, I’ll feel peace.”

Spirit says,
“Find your peace and then everything will fall into place.”

~Marianne Williamson
You can let your diagnosis define you…

Or you can redefine your diagnosis.
The Gut Brain Connections in Parkinson’s Disease

Michelle Burack, MD
GUT-BRAIN CONNECTIONS IN PARKINSON’S

Michelle A Burack, MD PhD
Assistant Professor of Neurology
University of Rochester Medical Center

GOALS

- Describe connections between the gastrointestinal tract and the brain
  - Connection #1: Port of entry for nutrients (and medications)
    - The journey of a molecule from your mouth to your brain
  - Connection #2: Nerve connections between the brain and gut
  - Connection #3: Gut bacteria & the brain
GOALS

- Relevance of these connections to PD
  - Timing of medications relative to food
    - Other routes for levodopa delivery
  - Nutrition & diet
  - Management of constipation

Digestive System

Gastrointestinal Tract
1. Mouth
2. Pharynx
3. Esophagus
4. Stomach
5. Small Intestine
6. Large Intestine

Accessory Structures
1. Teeth
2. Tongue
3. Salivary Glands
4. Liver
5. Gallbladder
6. Pancreas
THE DIGESTIVE TRACT TURNS FOOD INTO BUILDING BLOCKS

Mechanical grinding (muscle contractions) + chemical (enzymes)

Protein → Amino Acids

Fats → Fatty Acids + Cholesterol

Minerals

Water

Vitamins

DNA & RNA → Nucleic Acids

Carbs → Sugars

Pyrimidines

Pyridine
THE JOURNEY FROM MOUTH TO BRAIN

- Mouth: chewing breaks food into smaller pieces
- Esophagus: conduit from mouth to stomach
- Stomach: add acid & mechanically liquefy food
- Small intestine: add enzymes to digest protein, carbohydrate, & fats into amino acids, sugars & fatty acids
  - Checkpoint 1: nutrients actively absorbed into the bloodstream
- Blood circulates to brain
  - Checkpoint 2: nutrients actively transported across the blood-brain barrier

BUILDING BLOCKS ARE ABSORBED IN THE SMALL INTESTINE

- Folds in the lining of the small intestine → enlarged surface area
- Thousands of small fingers ("Villi") on the surface of each fold → more surface area
- Surface of each individual cell lining each finger has thousands of small projections (microvilli) → huge surface area for contact with liquefied food
BUILDING BLOCKS ARE ACTIVELY TRANSPORTED ACROSS THE LINING OF THE SMALL INTESTINE

- The cells lining the small intestine form a barrier
- Transporters in the membrane of the microvilli bind nutrients and bring them into the body
- ("Entry by invitation")

THE LARGE INTESTINE’S JOB IS TO ABSORB WATER AND ELECTROLYTES

- Things that are not absorbed →
  - 75% water
  - 25% solids
    - Fiber (e.g. cellulose from plant walls) ~25%
    - Bacteria (dead & living) 25-50%!
    - Mucus and dead cells from the intestinal lining
    - Things excreted from the liver into the gastrointestinal tract
      - Fat
      - Products of hemoglobin metabolism (brown color)
      - Some drug metabolites
THE BLOOD BRAIN BARRIER

- Once absorbed nutrients are in the blood, there is another entry checkpoint to reach the brain

![Diagram of blood brain barrier]

Active transport: Entry by invitation

PILL MEDICATIONS FOLLOW A SIMILAR JOURNEY

- Physical and chemical structure of the pill controls how fast it breaks down
- Some medications require active transport to enter the bloodstream from the gut
  - Levodopa uses "aromatic amino acid" transporter in the small intestine
  - Other small-molecule drugs that act on the brain are "lipophilic" (fat-loving) to allow them to pass directly through membranes of the intestine and blood-brain barrier

![Diagram of pill medication process]
LEVODOPA ABSORPTION & MOTOR FLUCTUATIONS

- Delays from mouth → stomach → small intestine → blood contribute to motor fluctuations with levodopa
- "immediate release" vs. "controlled release" vs. IPX066 (Rytary)

FOOD & MEDICATION ABSORPTION

- Food (particularly high-fat foods) can slow exit from stomach into small intestine
- High protein content may interfere with levodopa absorption in the small intestine (competition for amino acid transporter)
FOOD & MEDICATION TIMING

- Dogma: avoid taking PD medications (especially L-DOPA) with meals
- Reality: “It depends”
  - Is it practical?
    - If linking medication dose to mealtime helps someone remember to take it, dose with meals is better than missing a dose altogether.
    - If medication schedule is every 2 or 3 hours, it is virtually impossible to avoid a meal
- Do you notice a difference?
  - If you don’t notice a difference in medication benefit with vs. without food, it probably doesn’t matter
  - Some people notice side effects are worse on an empty stomach (slower absorption can be helpful to reduce nausea & dizziness)

MEASURED LEVODOPA DOSE AFTER HIGH PROTEIN VS HIGH CARB MEAL → NO DIFFERENCE IN BLOOD LEVELS

Table 2. Mean plasma levodopa levels (nmol/ml) in nine patients with PD before and after ingesting carbidopa/levodopa with breakfasts of different nutrient composition:

<table>
<thead>
<tr>
<th>Time</th>
<th>High Carbohydrate</th>
<th>High Protein</th>
<th>Balanced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before</td>
<td>1.98 ± 0.67</td>
<td>1.82 ± 0.51</td>
<td>1.88 ± 0.56</td>
</tr>
<tr>
<td>After 1 hr</td>
<td>3.38 ± 0.62</td>
<td>4.57 ± 0.96</td>
<td>3.45 ± 1.06</td>
</tr>
<tr>
<td>After 2 hrs</td>
<td>3.56 ± 0.84</td>
<td>2.35 ± 0.32</td>
<td>2.26 ± 0.59</td>
</tr>
</tbody>
</table>

Repeated measures ANOVA:
- Diet: p = 0.55.
- Time: p = 0.61.
- Diet × time: p = 0.17.
IF FOOD DOES SEEM TO INTERFERE WITH MEDICATION EFFECTIVENESS

- Protein is a necessary part of the diet → can’t eliminate it completely
- Divide into smaller amounts at each meal rather than all in one meal
- If movement is worse later in the day, shifting higher protein to breakfast rather than dinner may work better

OTHER TRICKS THAT CAN HELP WITH MEDICATION ABSORPTION

- Drink plenty of water with your pills
  - Accelerate the journey from mouth to stomach with a waterfall
- Levodopa (immediate release only): you can crush pills to further accelerate the journey
  - CR pills are not meant to be crushed
FOR SEVERE FLUCTUATIONS: DIRECT DELIVERY VIA "THE PUMP"

Tube inserted through wall of stomach into the small intestine

Pump delivers continuous infusion of carbidopa-levodopa gel (Duopa) through the tube

This part outside the body: Green port connects to pump

This part inside the body: tip in small intestine

Cartridge with gel medication

IN THE PIPELINE: OTHER ROUTES THAT BYPASS THE GUT

- Inhaled levodopa (CVT-301, Accorda)
  - lungs = massive surface area for diffusion into bloodstream

- Subcutaneous levodopa (ND0621, NeuroDerm)
  - Special formulation required to keep levodopa dissolved for delivery under the skin via pump-patch
NERVES IN THE GUT: THE SECOND BRAIN

- Network of nerves in the walls of the intestine="Enteric Nervous System" (ENS)
  - Controls muscles for peristalsis
  - Senses chemistry of fluid and controls release of enzymes, water, and electrolytes into the intestine
  - Controls sphincter muscles between esophagus, stomach, & small intestine
- 500 million nerve cells in the gut; 100 billion nerve cells in the brain

CONNECTIONS BETWEEN CNS AND ENS

- Vagus nerve=direct connection from gut to brainstem
  - Gut→brain: Fullness; chemical composition
  - Brain→gut: Controls lower esophagus, stomach, pancreas & gall bladder
- Other connections via spinal cord
  - Sensing pain; control over elimination
RELEVANCE TO PD

- Constipation is common in PD
- Nerve cells in the gut that control motility release dopamine (the same transmitter that is lost in the brain in PD)
- Lewy bodies (the abnormal protein clumps found in the brain in PD) are also seen in enteric plexus neurons
  - More abundant in people with PD, but can also be found in people without PD (can’t diagnose PD via colonoscopy)

MIGHT PD START IN THE GUT?

- Constipation may precede onset of motor symptoms by a decade or more
- Lewy bodies are found in the part of the brainstem where the vagus nerve originates
  - "Braak staging" – sequential progression of Lewy body pathology
MIGHT PD START IN THE GUT?

- A provocative study using a Danish health registry looked at risk of PD in individuals who had vagus nerve surgery for ulcers
  - The findings were barely statistically significant, and the same dataset analyzed by a different group did not find a significant difference in PD risk after vagotomy

GUT-BRAIN CONNECTIONS AND PD RISK: EVIDENCE IS BUILDING, BUT NOT YET PROVEN

- Areas for further research:
  - Does the presence of Lewy Bodies in colonoscopy biopsies from people without PD predict future development of PD?
  - Is the vagus nerve a route of entry for environmental toxins to trigger PD in the brain?
    - Evidence from animal models, but this may or may not be relevant to human disease
MICROBIOME AND THE BRAIN

- Our microbiome is an inseparable part of each of us
  - There are ~3x more bacteria in your body than human cells
    - 100 trillion bacteria; 38 trillion human cells
  - 90% of the DNA in your body is bacterial DNA
    - ~1000 different species; 7000 different strains
- We evolved together—symbiosis
  - Bacterial enzymes aid digestion
  - Bacteria manufacture vitamins like folate and thiamine that we can absorb
  - The foods we eat feed the bacteria
  - What we eat impacts what species of bacteria thrive
- "Dysbiosis" = changes in the microbiome population associated with pathology or disease

HYPOTHESESIZED ROUTES FOR MICROBIOME INFLUENCE ON THE BRAIN

- Effects on the immune system
  - Different bacteria species/strains provoke different immune system response
  - Inflammation can make the intestinal barrier leaky
  - Inflammation can make the blood-brain barrier leaky
  - Immune response regulates metabolism of tryptophan by the liver
    - Tryptophan is converted to the neurotransmitter serotonin, which is involved in mood regulation
HYPOTHESIZED ROUTES FOR MICROBIOME INFLUENCE ON THE BRAIN

- Bacteria metabolism
  - Bacteria digest food into chemicals that activate brain cells (e.g. short chain fatty acids) and produce neurotransmitters like GABA, dopamine, and norepinephrine
- Bacteria fragments
  - Pieces of dead bacteria can enter the bloodstream and affect the brain

WHAT DO WE KNOW ABOUT THE MICROBIOME IN PD?

- 5 different studies conducted 2014-2017 comparing gut bacteria in PWP to controls
  - A few species found to be different in at least 2 different studies
  - Many potential confounds (diet, medications, physical activity)
  - The 2017 study also looked at bacterial metabolites (short chain fatty acids) and found that these were lower in PWP
  - Biological significance is thus far unclear
### AREAS FOR FURTHER RESEARCH

- Does the microbiome affect medication absorption?
- Do probiotics help improve symptoms? Slow disease progression?
- Are certain bacteria strains associated with developing PD? Or faster progression?
- Can diet changes affect the microbiome in ways that are favorable for symptoms or disease progression?
NUTRITION AND DIET

- There is no scientifically validated "Parkinson's diet"
  - You will find lots of recommendations out there
  - These are mostly based on extrapolation of research from other groups of people (healthy aging, Alzheimer's disease, mice, etc)

NUTRITION AND DIET

- General principles of healthy eating apply:
  - "Food that remembers where it came from"
  - Healthy plate = 50% fruits & vegetables

- Antioxidants: brightly colored foods (carrots, beets, dark green vegetables); green tea
PD IMPACT ON NUTRITION

• Loss of sense of smell → food may be less flavorful
  • Boost primary taste senses of salt, sweet, sour
• Slower eating & effortful chewing → less calorie intake
  • Monitor weight
  • Modify food preparation to make it easier to chew & swallow
  • Add high-calorie foods if needed (healthy fats: nuts, avocado, olive oil, coconut oil)
• Impact of bladder symptoms on water intake
  • Can make constipation and low blood pressure problems worse

VITAMIN SUPPLEMENTATION

• Consider Vitamin D supplement
  • High prevalence of vitamin D deficiency in northern latitudes
  • Important for bone health (prevent fractures caused by falling)
• Consider testing for B12 levels
  • B12 deficiency causes loss of feeling in the feet, and can cause memory loss
  • Levodopa metabolism requires B12
  • Evidence for increased risk of B12 deficiency in PD
• Iron can interfere with levodopa absorption
• B6 can reduce levodopa effectiveness
OTHER NUTRITION RESOURCES

- Parkinson disease foundation webinar
  - www.pdf.org
    - Library of Online Seminars: Nutrition and Parkinson's disease
  - Diet and Nutrition section in the Davis Phinney Every Victory Counts manual

CONSTIPATION

- Enteric neuron degeneration → slower peristalsis → more time in large intestine → more water absorbed → dry stool → constipation
STEP 1: KEEP STOOL SOFT

Osmosis
- Semipermeable membrane

More nonabsorbable stuff (e.g. fiber, stool softeners)

Blood vessel
Large Intestine

High Solute
Low Solute

MORE WATER!

Water
Non absorbable stuff

“NONABSORBABLE STUFF”

- Dietary fiber
  - Fruits & veggies (especially seeds & skins)
    - Raspberries & strawberries
  - Whole grains
  - Beans, split peas
  - Broccoli, artichokes
- Fiber Supplements (e.g. psyllium powder or tablets)
  - If you don’t add water, it won’t help – you will just have a block of concrete
OTHER “NONABSORBABLE STUFF”

- Sorbitol
  - a non-absorbable sugar
  - Found in prunes and other stone fruits
- Docusate (Colace)
- Polyethylene glycol (Miralax, GoLytely)

- Don’t forget the water!

WHAT IF STOOL IS SOFT BUT STILL CAN’T GO?

- Stimulate peristalsis
  - Timing
    - default wiring favors the morning
    - "gastro-colic reflex"—stimulated by meals
  - Warm liquids
  - Caffeine (mild stimulant, although can be a diuretic if not consumed regularly)
- EXERCISE!!!
  - Moving your body activates the intestines
- Water Enema
  - Stretching the wall of the rectum can stimulate muscle contractions in the intestine
STIMULANT MEDICATIONS (LAXATIVES)

- Senna
  - A tropical plant
  - Tea; pill form
    - combination with docusate = Pericolace, Correctol
- Milk of magnesia
- Bisacodyl (Dulcolax)
- Tend to lose effectiveness over time

IN SUMMARY

- Many connections between the gut and the brain
  - Absorption of nutrients, fuel, & medications
  - Nerve highways from gut to brain and back
  - Microbiome
  - Dynamic new area of research; no new treatment recommendations derived from this research thus far
- Fruits and veggies are your friend
- Water is important
Psychological Issues with Parkinson’s Disease

Fahed Saada, MD
Supplementary Information on Psychological Issues with Parkinson’s Disease for Your Review

Psychological Issues with Parkinson’s Disease

Fahed Saada, M.D.
October 11, 2018

Parkinson’s Disease

More Than Motor Symptoms
Objectives

• Introduce common non-motor symptoms of Parkinson’s disease (PD): Depression, Anxiety, hallucinations, and delusions

• Describe the symptoms of PD hallucinations and delusions

• Explore how you can talk to your health care provider about your symptoms and establish a treatment plan

Non-Motor Symptoms in PD:
Depression, Anxiety, Hallucinations and Delusions
Parkinson’s Disease Is More Than Just Motor Symptoms

- Approximately 1 million people in the US have Parkinson’s disease (PD)
- The most familiar symptoms of PD are motor symptoms, or TRAP
  - Tremor
  - Rigidity/stiffness
  - Akinesia/slowness of movement
  - Postural instability/trouble with balance
- Non-motor symptoms
  - Are common and experienced by the majority of people with PD
  - Can be more troublesome than motor symptoms in terms of quality of life

Depression and anxiety

- Depression and anxiety involves approximately 30-40% of patients with PD
- Predate motor symptoms by several years
- Clinical characteristics:
  - Low mood, lack of interest or pleasure, altered appetite or sleep, weight change, loss of libido, reduced memory, and loss of energy
  - Rare but feeling guilt, worthlessness and suicide ideation can be seen
- Most common anxiety disorder include panic attacks, simple and social phobias.
Depression and Anxiety

• Management
  • Non-pharmacological therapy such as counselling, patient education, and cognitive-behavioral therapy
  • Pharmacological therapy
    • Dopaminergic
    • Psychotropic

Hallucinations and Delusions

• More than 50% of people with PD develop hallucinations and/or delusions at some point during the course of their disease

• Hallucinations: seeing, hearing, or otherwise perceiving things that are not really there

• Delusions: believing things that are not true despite evidence to the contrary
What Hallucinations and Delusions Are Not

• Hallucinations and delusions are perceptions or beliefs that are not real which makes them distinct from other conditions

• Hallucinations and delusions are NOT dementia or Alzheimer’s and are NOT vivid dreams or problems with sleep

What Can Cause Hallucinations and Delusions in PD?

• Internal Causes:
  • Progression of PD
  • Dehydration
  • Change in vision
  • Other medical conditions
  • Infection

• External Causes:
  • Some PD medication or other medications
  • Alcohol or other recreational drugs
  • Dim lighting or time of day
Who is at Risk and Why?

- Older age
- PD duration
- PD severity
- PD medications
- Dopamine deficiency is believed to play a major role in motor symptoms
- Serotonin is thought to play a major role in hallucinations and delusions

Hallucinations and Delusions

- Early symptoms: insight is retained
- Symptoms progress
- Later symptoms: insight is lost
Hallucinations

- Seeing, feeling, tasting, hearing, smelling things
- Abnormal body sensations

Delusions

- What People with PD may believe
  - Persecutory Delusions
    - Impression of someone trying to harm, steal from, or deceive you
  - Jealousy Delusions
    - Impression partner is cheating on you
  - Reference Delusions
    - Believing a song or TV show is speaking to you directly
Why treat Hallucinations and Delusions in PD?

- Hallucinations and delusions were responsible for nearly 25% of hospitalization of people with PD

- Hallucinations and delusions in PD are associated with an increased burden on caregivers

Reporting Symptoms is Important

- Only 10-20% of people with PD will proactively mention their hallucinations and delusions to their health care providers
Treatment and Management

• Exclude other factors (e.g., infections, electrolyte imbalances)
• Drug treatment approaches
  • Nuplazid
• Non-drug treatment approaches
  • Self-managed coping strategies
    • Cognitive, interactive, visual techniques
  • Psychotherapy techniques
    • Cognitive-behavioral therapy
    • Supportive therapy
    • Psychoeducation

Nuplazid

• The first and only FDA-approved prescription treatment for hallucinations and delusions associated with Parkinson’s disease psychosis
How to Build Your Parkinson’s Plan of Attack

Sarah King, PT, DPT
How to Create Your Personalized Parkinson’s Plan of Attack

Your tool to fight back fear and reclaim your future, despite your diagnosis.

Dr. Sarah King, PT, DPT

Who is this for?

• You’ve been diagnosed with Parkinson’s and feel uprooted, anxious, or overwhelmed with what that means for you, your family, and your future.

• You’re a spouse, child, loved one, or CarePartner who is wanting to ensure your future together is the most positive and vibrant as possible.

• You’re been frustrated with the negative or depressing information you’ve found the internet about PD treatment and outcomes.

• You’ve found the resources - healthcare practitioners, support groups, etc. - lackluster in your area.
What you’ll learn today...

MINDSET
STRUCTURE

This presentation is NOT for you if...

• You’re waiting for me to give you a cure for Parkinson’s
• You’re looking for a “quick-fix” that takes zero effort or change to your lifestyle.
• You think anything that’s not medication is “snake oil”
Your Jump Start Guide

Access to the free 19-page “Parkinson’s Plan of Attack Foundations eGuide” that I created:

www.InvigoratePT.com/active-life-bonus

What is a Parkinson’s Plan of Attack?
Hello, Dopamine!

• Dopamine is responsible for:
  • Coordinating your body movement
  • Making memories and helping you learn
  • Motivation
  • Helping you experience pleasure and process pain
  • Keeping you awake and alert during the day
  • Increasing creativity

Hello, Dopamine!

• When 60-80% of cells are damaged, symptoms emerge.
• At diagnosis, 20-40% of your cells continue to produce dopamine.

YOUR FOCUS:
The 20-40% of healthy cells that remain
The 3 Components of Your Parkinson’s Plan of Attack

Component #1: MAXIMIZE
Component #2: PROTECT
Component #3: SUPPLEMENT
Your Mindset Matters

- Nothing I share today will matter if you don’t believe you can powerfully impact the trajectory of your disease.
- It’s okay to be scared.
- It’s also okay to have hope.
- If you’ve found yourself feeling hopeless, anxious, or paralyzed by fear, it’s important to seek out professional guidance.

MAXIMIZE
Component #1

GOAL: MAXIMIZE the dopamine you have circulating in your system.
• Our strongest tool supported the evidence is EXERCISE.

• While EXERCISE doesn’t help you produce more dopamine, it does help you utilize the dopamine you’re producing more effectively.
PROTECT

Component #2

GOAL: PROTECT the undamaged brain cells that remain from further damage

(more on exercise later!)
• Parkinson’s Hallmark sign = Accumulation of alpha-synuclein

• These deposits (called Lewy bodies) affect chemicals in the brain.

• They cause brain cell death and cause disruptions in the way you move, think, and feel.

• Research suggests a link between this brain degeneration process and inflammation.

In other words:

• The culprit responsible for a majority of cellular damage in your brain and body is chronic, low-grade inflammation.

• In order to protect your brain cells from as much future damage as possible, you have to lower your body’s inflammation levels.
Does what I eat really matter?

Quick look:

• Brain health is directly tied to inflammation.
• Your gut health and blood sugar levels both impact inflammation.
• What you eat is the main driver of your gut health and blood sugar levels.
• What you eat = Brain Health
What foods are “good” to eat?

4 Foods to Dump
&
5 Foods to Add
(included in my free eGuide)

www.InvigoratePT.com/active-life-bonus

Research is showing that those who follow a Mediterranean-style diet show slower progression of Parkinson’s symptoms.

Don’t neglect these!

- SLEEP
- STRESS
- YOUR TRIBE
- TOXINS

SUPPLEMENT Component #3

GOAL:
SUPPLEMENT your program with additional strategies that boost your dopamine levels, compensate for lost function, or are symptom-specific.
Personalizing Your Plan

Quick recap…

• MAXIMIZE
• PROTECT
• SUPPLEMENT

What are your choices?
What works?

• Some general supplements are beneficial for brain health.
• Most efficient to get a personalized supplement profile that’s been tailored to your deficiencies.
• www.ifm.org/find-a-practitioner
• Cons:
  • $$$
  • Not typically covered by insurance

Time to check in!

Are you feeling overwhelmed?

This is a marathon, not a sprint.
It doesn’t matter if you’re newly diagnosed or a decade into your Parkinson’s journey, I want you to know:

You are not alone.

There is more you can do than simply take more medication and pray for a cure.

That journey begins with one step.

And it can start today.

Start Building Your Plan of Attack

Download your free Foundations Checklist:

www.InvigoratePT.com/active-life-bonus


You’re invited!

Join us inside our free Facebook group, The Invigorated Community
www.InvigoratePT.com/community

Subscribe to us on YouTube
www.InvigoratePT.com/youtube

“Like” us on Facebook
www.InvigoratePT.com/facebook
Exercise is Medicine Workshop

Sarah King, PT, DPT
Exercise is Medicine

Movement Workshop

Dr. Sarah King, PT, DPT

Exercise = Brain Change = Medication

Concept #1: NeuroPlasticity
Concept #2: Maximize Dopamine
The 7 Elements

1. BIG, POWERFUL MOVEMENTS
2. PHYSICALLY CHALLENGING
3. MENTALLY CHALLENGING
4. SPECIFIC TO PARKINSON’S SYMPTOMS
5. FUN
6. SOCIAL
7. ACCOUNABILITY

What kind of exercise is best for Parkinson’s?

7 Elements of a Highly Effective Parkinson’s Exercise Program

(included in my free eGuide)

www.InvigoratePT.com/active-life-bonus
(Yes, it can be fun!)

Side Effects

Exercise as Medicine can lead to…

- More Energy
- Elevated Mood
- Increased Stamina
- Maximal Mobility & Independence

… Don’t miss a dose!
Where should you start?

PHYSICAL THERAPY
PERSONAL TRAINING

GROUP FITNESS CLASSES
ONLINE EXERCISE PROGRAMS

Getting Started Guide on the Invigorate blog:
www.InvigoratePT.com/blog

“How do I know when to see a physical therapist?”

Everyone:
• At diagnosis
• Annual “Check-up”
• Recent decline, injury, or illness

Those at a High Risk for Falls:
• > 1 fall in the last 3 months
• Can’t stand on one leg for > 5 seconds
• Freezing or Festination
5S Method to Overcome Freezing

FREEZING:
- 1 in 3 people with PD
- Disconnect between brain & body
- Walking in crowded spaces, narrow hallways, cluttered areas
- “My scooter is broken!”

5S METHOD
- STOP
- STAND TALL
- SHAKE IT OFF
- SHIFT YOUR WEIGHT
- STEP

... shall we practice?

You CAN beat freezing!

Think I’m crazy? Let’s meet Jerry…

https://youtu.be/SnVwWLAh11M
Time to MOVE!

PWR!Moves - Sitting

Time to MOVE!

PWR!Moves - Standing
Questions?

Don’t forget to grab your free eGuide!

www.InvigoratePT.com/active-life-bonus

Includes:
7 Elements of a Highly Effective Parkinson’s Exercise Program
Living an Active Life with Parkinson’s Disease Conference - October 11, 2018

Caregiver Summit/ Cumbre Para Cuidadores
A free event specifically for caregivers of people living with Parkinson’s

Saturday, December 1, 2018

Liverpool Public Library
310 Tulip St. Liverpool, NY 13088
Registration 10:15am - 11:00am
Summit 11:00am - 2:45pm

Meet your caregiving community. Join Syracuse as we tune in to the bilingual 2018 Parkinson’s Foundation Caregiver Summit/Cumbre Para Cuidadores. Thousands will participate from sites across the country.

Presenting sponsor:

Thank you to our local sponsors:

Register today! Parkinson.org/Summit

Prefer to join from the comfort of home? Register now in English or Spanish to join us from a personal computer, tablet or phone.

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Onondaga County Office for Aging Highlights  
Resources for Older Adults

315-435-2362  www.ongov.net/aging

**Caregiver Discussion Groups:** Brookdale Manlius, 100 Flume Road, Manlius, NY. Meets the first Wednesday of each month at 2:30 pm (2nd Floor Dining Room.) Park Terrace at Radisson, 2981 Town Center Road, Baldwinsville, NY. Meets the third Wednesday of each month at 2:30 pm. The Hearth on James, 830 James Street, Syracuse, NY. Meets every other Thursday at 3:30 pm. Brookdale Summerfield, 100 Summerfield Village Lane, Syracuse, NY. Meets every other Thursday at 6:00 pm. Call Johanna, 315-435-2362, Ext. 4994 for information.

**Public Hearing:** We need your input to plan our 2019 services! Join us on Thursday, October 18th from 1:00 to 2:30 pm at Bethany Baptist Church, 149 Beattie St., Syracuse, NY 13224. Includes a Senior Scam Prevention Presentation. Real-time captioned. Light refreshments served. Call 315-435-2362 for information or for special accommodations.

**Medicare Enrollment:** For 2019 Medicare coverage, open enrollment is from October 15 to December 7th. Individual questions can be answered by calling 315-435-2362.

**Caregiver FREE Classes:** For Current or Future Caregivers. Open to the Public. Classes in October and November, all from 5:30 to 7:00 pm except where noted:

**October**
- Caregiver or Employee? 10/16 5:30-7pm Manlius Library
- Powerful Tools for Caregivers (6 Tues.) 10/16-11/20 5-7pm The Hearth on James
- Living Healthy With a Chronic Condition (6 Mon.) 10/22-11/26 10-12:30pm Southwest Comm. Ctr.
- Organizing (2 Sessions) 10/23 & 10/30 5:30-7pm NOPL at Cicero

**November**
- How We Change As We Age 11/1 5:30-7pm The Dunbar Center
- Planning for Aging (2 Sessions) 11/8 & 11/15 5:30-7pm Sage Upstate
- Dementia Conversations 11/12 5:30-7pm Brookdale Eastside

Call 315-435-2362 x4993 or x4994 with questions. Catalog/registration form are available on-line at [http://www.ongov.net/aging/icare](http://www.ongov.net/aging/icare).

**Office for Aging:** Don’t forget to check out the Office for Aging’s updated website at [www.ongov.net/aging](http://www.ongov.net/aging). Parkinson’s Initiatives can be found at [http://www.ongov.net/aging/parkinsons.html](http://www.ongov.net/aging/parkinsons.html). This includes archived copies of our quarterly newsletter as well as archived versions of our Parkinson’s Conference Education Guides.

**Onondaga County Office for Aging 10th Floor, 421 Montgomery Street, Syracuse, NY 13202**
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