

The Problem of Failed Trials — and One Piece of the Solution

By Robin Elliott

Over the past five years, more than a dozen potential treatments for Parkinson's disease (PD) have gone through clinical trials in the United States.



All but two turned out negative. This dismal count represents disappointments for everyone — the study volunteers who went to considerable trouble and some risk to participate, the companies that lost money, the doctors who invested their time ... and the Parkinson's community as a whole, which has waited patiently through what seems to have been the worst drought in the flow of new Parkinson's treatments since the discovery of levodopa almost a half-century ago.

Why this sorry record? What can we — and you — do to improve it?

Over the summer, I put the question to more than

a dozen of the most knowledgeable Parkinson's scientists in the United States. I would like to share with our readers some of what I learned — and conclude with an idea for something we can do today to improve and accelerate the search for new therapies.

First, a couple of general observations. One is that the problem is not something unique to Parkinson's. In other areas, one prominent scientist from the National Institutes of Health (NIH) told me much more money has been spent, with fewer results, than it has in Parkinson's. The failure rate in all disease areas is a measure of the immense challenge that scientists face in identifying and tracking the mechanisms of diseases and then in translating these findings into the development of new treatments.

Second, a negative finding is not the same as a failure. When we do get within sight of tomorrow's "cures," we will likely find ourselves standing on the shoulders of yesterday's "failures." To pick a real-life example, the lessons we learned about the growth factor GDNF in a Phase II trial that failed in 2004 are being applied today in two new trials. >> Read more on page 6

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Science News |

Use of Antipsychotic Drugs Is Common for Parkinson's Despite Risks

Physicians routinely prescribe antipsychotic drugs to elderly people with Parkinson's disease (PD) and psychosis, many of whom also have dementia — even though these drugs can worsen Parkinson's symptoms, and despite warnings that newer antipsychotic medications increase the risk of death in older people with dementia. This study appears in the July 2011 issue of *Archives of Neurology*. In the later stages of PD, people can develop psychosis. It may be mild — for example, mistaking objects with animals — but it may >> Read more on page 8

New Genetic Mutation Linked to Parkinson's

Using a new, cutting-edge technology for gene sequencing, researchers funded in part by the Parkinson's Disease Foundation (PDF) have discovered a new gene, the VPS35 gene, that is linked to Parkinson's disease (PD) in people with familial PD. The results appear in the July 14 issue of the *American Journal of Human Genetics*. In recent years, researchers have identified about a dozen genes that either cause PD or increase the risk of developing the disease. A team of researchers led by Carles Vilariño-Güell, Ph.D., and Matthew J. Farrer, Ph.D., >> Read more on page 8

PDF Newsletter Gets a Makeover

Based upon your feedback, the Parkinson's Disease Foundation® (PDF®) recently re-designed this quarterly newsletter, *News & Review*. We hope the re-design helps readers — whether you are recently diagnosed, have been living with Parkinson's disease (PD) for several years or are a care partner, health professional or researcher — to find the information you need.

The newsletter includes:

Science News including PDF-funded research and updates on treatments. For instance, see our report on page 1 about a PDF-funded study that discovered a new gene implicated in Parkinson's.

Tips on Coping with Parkinson's disease and its symptoms, such as those offered for orthostatic hypotension on page 4.

Personal Stories from people affected by Parkinson's, such as the letter by Peter Gall on page 9.

Resources that may help you, including the new series of *PD Expert-*

Briefings announced on page 10.

Profiles of the dedicated individuals who are raising funds for PDF, such as those on pages 10 and 11 that have ambitiously climbed Mount Kilimanjaro and golfed their way to more than \$60,000 for research.

Ways to Get Involved including the Clinical Research Learning Institute highlighted on page 12, or community events, such as those listed on page 11.

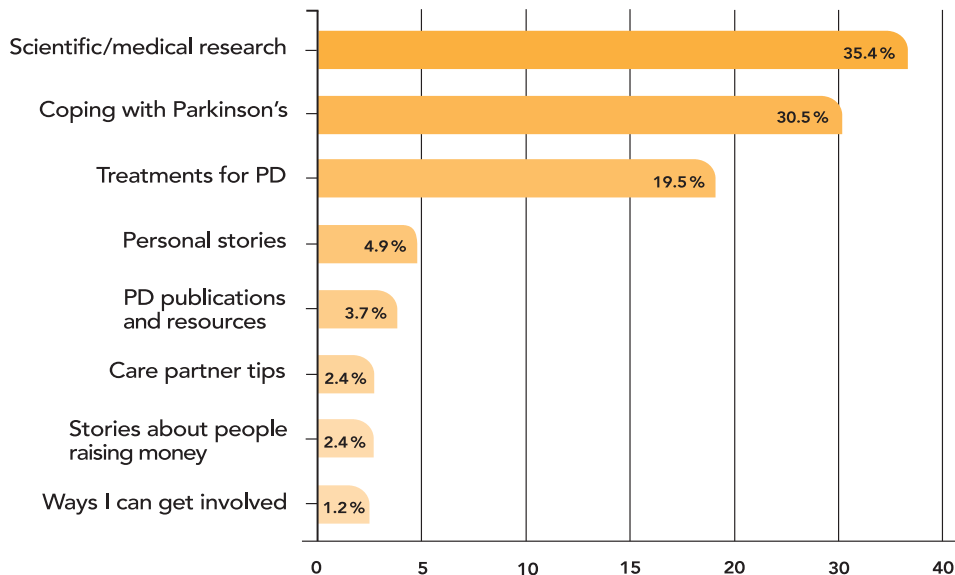
Your Feedback

How did we make these changes? Over the past several years, you have written and called us to let us know your thoughts. Many of you also responded to the survey we posted online last year. See the results below.

What Do You Think?

With the new *News & Review*, we will be doing our best to support your life with Parkinson's. Please give us your feedback on this new design at www.pdf.org/survey11.

PDF Asked Its Readers: What information do you look for in PDF News & Review?



In our Inbox

Viewers Comment on June's "Complementary Therapies" PD ExpertBriefing

Dr. Melanie Brandabur was her usual excellent self. I have heard her at our Chico, CA, group and at the Sacramento PANC conferences. She is practical and informative.

This is my first briefing. (My sister has a new diagnosis.) I was less interested in the particular subject today than in seeing the format and the level of expertise. I was very impressed, and will attend future briefings (and be better prepared to ask questions), as well as look at archives. Thank you.

Wonderful program — hope we can get more funding for many of these issues.

Very well done and informative. It really helps to hear things from the doctor directly. I will think differently now about this topic and that is a good thing. Thank you again.

All responses to PD ExpertBriefings are submitted anonymously via survey.

PDF Research Advocates Tackle Scientific Meetings, Reminisce About Training

@PDFparkinson CRLI prepped me to understand everything in Clinical Trials Plenary this morning at #MDSCongress. I was jazzed! #Parkinson's

June 7

@newPWP Diane Cook, Via Twitter about her experience at a major scientific meeting

Patti Richardson Meese and James M. Patterson from last year's Clinical Research Learning Institute class are shocked that it has been almost a year. Almost a year of spreading the word ... thanks PDF.

August 14

James M. Patterson, Via Facebook

Diane, Patti and James are PDF research advocates through the Parkinson's Advocates in Research (PAIR) program. They all underwent training via the Clinical Research Learning Institute (see page 12 to join the program).

Share comments and suggestions with the Parkinson's Disease



Foundation at 1359 Broadway, Suite 1509, New York, NY 10018, info@pdf.org or call (800) 457-6676.

PDF-Funded Research is Leading to Better Understanding of Dyskinesias

Could it be that the involuntary writhing movements experienced by many people as Parkinson's disease (PD) progresses are caused by serotonin neurons?

During his time as a Parkinson's Disease Foundation (PDF) research fellow in 2007, Manolo Carta, Ph.D., of Cagliari University in Italy, found evidence to support this theory. In collaboration with Anders Björklund, M.D., at Lund University in Sweden (also previously supported by PDF), Dr. Carta used funding from PDF to investigate the role of serotonin neurons, and how they may be manipulated to prevent or suppress dyskinesias.

Dyskinesias can occur in the later stages of Parkinson's and are caused by levodopa (Sinemet®). Dr. Carta suggests that it is serotonin neurons — not the dopamine neurons normally implicated in Parkinson's —

that work with levodopa to cause dyskinesias.

It is known that when a person takes levodopa, dopamine neurons in the brain convert the medication into dopamine. The extra dopamine helps to ease the symptoms of Parkinson's. The dopamine neurons have a "feedback control mechanism" that ensures they release just the right amount.

But as Parkinson's progresses, and more levodopa is required, serotonin neurons also pitch in to convert levodopa to dopamine. Unlike dopamine neurons, however, serotonin neurons cannot regulate the release of dopamine. They sometimes release excessive levels, causing dyskinesias.

Dr. Carta and Dr. Björklund theorized that if scientists could find a way to suppress this overproduction, they might be able to stop the dyskinesias.

They tested a combination of two serotonin agonists — both designed to stop serotonin neurons from producing dopamine — at very low doses in animal models. They found that this combination was effective in preventing too much dopamine from being released and — when administered from the very first dose of levodopa — were also effective in stopping the cellular changes that lead to dyskinesias.

These findings led Dr. Carta to develop a compound that would imitate these effects and work in humans. The compound is in an early stage clinical trial, where it is being evaluated for efficacy and safety. The first round of results is expected later this year. If successful, one possible outcome would be the development of a drug that would offer the anti-parkinsonian benefits of levodopa but suppress the dyskinetic side effects.

Dr. Carta's work has added valuable insight into the mechanisms behind dyskinesias. Certainly any new knowledge about this common medication side effect is welcome by the Parkinson's community. Dr. Carta noted, "PDF's early support first allowed us to explore the potential of this idea, which in turn enabled its progression to a clinical trial. We look forward to reporting results to the community as they are released."

Dr. Carta is Assistant Professor at the University of Cagliari in Italy, and still actively collaborates with Dr. Björklund. Dr. Carta was funded through the Research Fellowships Program. In FY2012, PDF is supporting five research fellowships with total funding of \$250,000.

To learn more about PDF research, visit www.pdf.org/results_funded.

"PDF's early support first allowed us to explore the potential of this idea."

Manolo Carta, Ph.D.



Help Further Parkinson's Science

Improve the lives and futures of people touched by Parkinson's as a PDF-funded researcher.

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- Conference Awards

Learn more about eligibility and application details: grants.pdf.org



Orthostatic Hypotension (Low Blood Pressure) and Parkinson's

Callers to the Parkinson's Disease Foundation (PDF) National HelpLine frequently ask us for tips about coping with a condition known as orthostatic hypotension (OH), or low blood pressure. If you have experienced it, you may already know that this symptom is common in mid- and late-stage Parkinson's disease (PD), and it can be quite alarming.

Orthostatic hypotension is a sharp drop in blood pressure that happens when a person gets up from bed or from a chair, causing dizziness or even loss of

consciousness. Doctors define it as a blood pressure drop of 20 millimeters of mercury (20 mm Hg) in systolic blood pressure (the top number in a blood pressure reading), or a drop

of 10 millimeters in diastolic blood pressure (the bottom number), within three minutes after standing up.

The condition can put people with Parkinson's at risk of fainting, losing balance, falling, and being in-

jured. What can you do? One thing you can do is learn strategies to predict when blood pressure is most likely to fall. Another is to take steps to avoid feeling dizzy in the first place.

Symptoms

Your doctor can test for OH by measuring your blood pressure. If you feel a little dizzy when you first stand up — but the feeling passes quickly — you probably do not have the condition. If instead your blood pressure continues to drop after a minute or more of standing, this may suggest a problem. It is important that your physician measure your blood pressure while you are lying down, sitting and standing. Sometimes, the problem of OH is only revealed when the blood pressure is measured in these three positions.

The symptoms of OH include the following:

- lightheadedness
- dizziness
- weakness
- difficulty thinking
- headache
- feeling faint
- fainting
- trembling
- nausea
- cold hands and feet
- chest pain

"Learn strategies to predict when blood pressure is most likely to fall."



Tips for Avoiding Orthostatic Hypotension

- Drink lots of water and other fluids, at least one cup (eight ounces) with meals and two more at other times of the day.
- After consulting your doctor, increase your salt intake by eating prepared soups or pretzels. (Note: for people with heart disease, this should be avoided.)
- Exercise gently and regularly — and avoid long periods of inactivity.
- Eat small, frequent meals.
- Reduce alcohol intake.
- Avoid hot drinks and hot foods.
- If you expect to be standing for a long period of time — while shopping, for example — quickly drink two eight-ounce glasses of cold water. This will increase blood volume and causes blood pressure to go up for a couple of hours.

If you experience dizziness in the morning:

- Raise the head of the bed by four inches (10 cm).
- Drink two eight-ounce cups of cold water 30 minutes before getting up.
- Do isometric exercises before getting up that contract the leg or feet muscles. For example, raise the toes, contract the thigh muscles and hold for 30 seconds, or march the legs slowly in place.
- Shift slowly from lying to sitting and then standing.
- Try putting on an abdominal binder before you get out of bed (and remove it before lying down again). Compression garments such as antigavity stockings can be effective in preventing OH.

Causes

Normally, when a person rises from lying down or sitting, the blood vessels constrict and send blood from the legs and trunk up to the head. In addition, the heart beats slightly faster and more forcefully. In people living with PD, the heart rate may not increase upon standing, and the blood pressure may drop as a result.

Both Parkinson's itself, and the medications that are used to treat it, can contribute to OH. In addition, people with Parkinson's may be on other medications that affect blood pressure. Specifically, the medications that can cause OH in Parkinson's include carbidopa/levodopa (Sinemet®), bromocriptine (Parlodel®), ropinirole (Requip®), and pramipexole (Mirapex®); drugs for high blood pressure, including calcium channel blockers; certain antidepressants; drugs to treat urinary problems, such as prazosin (Minipress®) and terazosin (Hytrin®); and drugs for erectile dysfunction (e.g., Viagra®).

Additional causes include diuretics, cardiac disease, dehydration, fever, and anemia.

How to Avoid Orthostatic Hypotension

If you can recognize your symptoms and are aware of what makes them worse, you can take steps to reduce and avoid them.

Most important is to avoid dehydration, especially during the months of hot weather. Ask your doctor to identify the medications you are taking that may lower your blood pressure, and see if a change in dose is indicated. Avoid abrupt changes in position.

Be aware of behaviors and circumstances that can make orthostatic hypotension worse.

These include the following:

- dehydration
- exposure to heat
- fever
- prolonged standing
- vigorous exercise
- drinking alcohol
- certain times of day (especially early morning)
- straining while going to the bathroom
- changing the position of the body (e.g., standing up)
- meals high in carbohydrates

For additional strategies, see our tips box, on page 4, and talk to your doctor about OH.

Drug Therapies

Ask your doctor whether there are any medicinal approaches that will help you manage OH and its effects. Options may include midodrine (ProAmatine®), fludrocortisone (Florinef®) or pyridostigmine (Mestinon®). Be aware that medications that raise low blood pressure to normal levels when a person is standing may cause high blood pressure when a person is lying down.

Conclusions

We hope these tips will help you cope with orthostatic hypotension. As always, feel free to call PDF's HelpLine staff — at (800) 457-6676, from Monday to Friday, 9 AM to 5 PM ET — with your questions about this or any other matter associated with Parkinson's.

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PPAC

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Will Your Employer Help you Support the Fight Against Parkinson's?

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Six Obstacles to Research

So why does the treatment pipeline move so slowly? I list six reasons that were mentioned most often in these conversations.

- **We need to know more about the basic science of Parkinson's.** We have come a long way, but we still don't understand enough about what causes the disease. Because of this, finding new drugs to treat it is a bit like looking for a needle in a haystack. Well, not quite; we do usually begin with a hypothesis about how something works before we send it on its way to a target in the brain. But the process would be much

easier if we knew more about the origins and nature of the disease, and this will only happen if we fight in the political arena

"Research advocacy is an innovation that for years has been hiding in plain sight."

Robin Elliott



for adequate funding for basic medical research — especially what is done through the NIH, which is by far the largest funder of research at this stage.

- **Mice don't get Parkinson's.** Nor, for that matter, do monkeys. Yet these are the organisms in which the tests are done before new drugs are tested in people. What this means is that just because something works in a mouse or a monkey doesn't mean that it will work in a human.

We clearly need to find better animal models by supporting the work of scientists such as Ane Korff, Ph.D., of St. Jude Children's Research Hospital, a recent PDF research fellow who is working on finding a new mouse model of Parkinson's.

- **Parkinson's may not be just a single disease, but several.** One implication of this is that a treatment that works for one group of people — for example, those who have specific genetic or clinical characteristics — may not for another. Yet most trials are done across large and complex populations — meaning that many partially successful trials are branded failures. We need to invest more in identifying these subtypes and in finding economical ways of developing treatments to address them.

- **My baby is the most beautiful in the world.** Of course — but when this attitude is brought to a clinical study by someone who is passionately convinced that the treatment is going to work — be it a com-

pany, a study director, or even a study participant — it can lead to misplaced enthusiasm and the ignoring of negative signals early in the research process.

We need to perform more critical analysis of earlier data — especially in the pre-clinical (that is, animal) phase of the process. It was partly with this in mind that PDF chose to fund Daniel Segal, Ph.D., a neuroscientist at Tel Aviv University in Israel, to study whether a molecule that has shown promise in the lab has the potential to become a PD therapy.

- **Our statistical methods need work.** According to Steven Piantadosi, M.D., a professor of mathematics at University of California, Los Angeles, the methods we use to measure the efficacy of investigational drugs in the early stages of the research process tend to exaggerate the promise of the treatments, and to give false optimism in the design of later-stage trials. He suggests that we take a harder look at animal studies and early human trials before proceeding to the later and more expensive stages.

- **We need more sensitive and accurate markers of how Parkinson's progresses over time.** The clinical observations of a doctor — even a very good one — are not sufficiently fine-grained to measure small changes in Parkinson's progression with the accuracy or speed that are needed to perform trials efficiently. What we need is a brain-based version of the global positioning system (GPS) that is used in a car — something that will tell doctors, using imaging techniques or chemical analysis of blood or spinal fluid, where exactly a person is in his or her Parkinson's "journey," and that will enable them to tell whether an investigational drug is helping to slow or reverse the disease.

What Next?

These conversations drove home for me the scientific complexities of the problem and the difficulties in getting new Parkinson's treatments discovered, developed and deployed. But they also suggested to me the need for creating an additional "front" in the drive for new therapies — one that channels constructively the collective voice of the people who have the greatest stake of all in the process: the people living with Parkinson's and their families. I call this "the power of research advocacy."

The Power of Research Advocacy

Research advocacy is an innovation that for years has been hiding in plain sight. It means formally integrating into the research process the unique knowledge, insight and urgency of people who live with Parkinson's and their families.

Over the past decade, PDF — building on the visionary work of the Parkinson Pipeline Project, a group of people with Parkinson's who have dedicated themselves to the cause of accelerating the development of new treatments — has taken the lead in Parkinson's research advocacy. We have done this through such initiatives as creating a community-wide website listing clinical studies (www.PDtrials.org) and staging a series of roundtables to find solutions to obstacles in research.

This led to one of our most exciting initiatives, Parkinson's Advocates in Research (PAIR), a program through which the 100 lay leaders who have gone through PDF's training programs (named the Clinical Research Learning Institutes) are deployed in a variety of volunteer assignments to change the landscape of research in Parkinson's.

These research advocates have the leadership skills to interact with the scientific community and influence research decision-making at all levels, and they are already having an impact — through the roles they play as research educators of support groups; advisors on study design; participants in institutional review boards; advocates in public policy

matters; and community representatives and presenters at professional conferences held by groups such as the Parkinson Study Group and the Movement Disorder Society.

PDF itself now incorporates research advocates in every single aspect of the review process that we use for our scientific grants. We are always on the lookout for others who may want to work with PAIR and are preparing to add new research advocates to the team through the three regional institutes that we will be staging in 2011–12 (see page 12).

We believe that engaging people living with Parkinson's disease in research decision-making is not just a warm and fuzzy idea; it is a vital means to improving the design, conduct and outcomes of clinical research down the road. It will create the opportunity to channel the energies of people with Parkinson's as active participants at the core of the research enterprise. And it will provide a conscience, and a good source of authentic intelligence to the process that has a single goal: improving the lives of people who live with Parkinson's disease.

Mr. Elliott is the Executive Director of the Parkinson's Disease Foundation.

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Antipsychotic Drugs* | Continued from page 1
progress to severe delusions, paranoia and hallucinations. In addition, individuals may experience dementia.

Led by Daniel Weintraub, M.D., at the University of Pennsylvania, researchers set out to understand how often doctors prescribe antipsychotics to people with Parkinson's and whether this pattern changed after 2005, when the US Food and Drug Administration (FDA) issued warnings about the risks of atypical antipsychotics.

The researchers analyzed medical records from the Department of Veterans Affairs of about 2,600 people with Parkinson's and psychosis (800 of whom also experienced dementia). They compared these to a group of about 6,900 people who had dementia but not PD. Nearly all were men. Finally, the authors compared rates of prescription of antipsychotics in 2002 and 2008.

Results

- In 2008, half of people with PD and psychosis, with or without dementia, were prescribed an antipsychotic.
- Quetiapine (Seroquel®) was the most frequently prescribed drug.
- Almost 30 percent of people who received an antipsy-

chotic drug received one with limited efficacy known to exacerbate Parkinson's motor symptoms.

- Clozapine, the only antipsychotic drug shown to be effective in people with Parkinson's, accounted for less than two percent of prescriptions.
- Prescriptions for "atypical" antipsychotics — newer drugs with less impact on motor symptoms — remained steady, despite a warning about the safety of these drugs for elderly people with dementia.

What Does it Mean?

Most antipsychotic drugs block dopamine, thus worsening the motor symptoms of PD. Some have been shown to shorten the life span of people with PD who are affected by dementia. However, the symptoms of psychosis can be so overwhelming that treatment is necessary despite these risks. The choice is to lower the dosage of anti-parkinsonian medications, or to start an antipsychotic medication. The authors conclude that physicians need to be better educated about the efficacy, side effects and risks of antipsychotic drugs for people with PD, and there is an urgent need for new therapies for psychosis in Parkinson's.

New Genetic Mutation* | Continued from page 1
at the University of British Columbia (UBC), Vancouver, searched for the new gene by studying a family from Switzerland in which 11 people in three generations were diagnosed with PD. They compared the DNA of family members with PD to that of unaffected family members to search for differences. The UBC researchers used a new and efficient technique called "whole exome sequencing," which focuses on small but important sections of DNA. These sections govern the production of proteins. Since mutated proteins are most often the cause of genetic diseases, they reasoned that mutations linked to inherited PD would be found here.

Results

- All 11 members of the Swiss family with PD had a mutation in the VPS35 gene.
- Among 190 additional families that showed many

cases of PD, three were found to have the same mutation (among a total of eight family members).

- The researchers tested DNA samples from more than 3,000 healthy individuals from several countries and found no mutations in VPS35.
- People with mutations in the VPS35 were diagnosed with PD around the age of 50. (Among the people with Parkinson's who have other gene mutations, symptoms begin at a younger-than-average age.)

What Does it Mean?

Like most other genetic causes of PD, this newly identified mutation is exceedingly rare, resulting in very few cases of PD. However, mutations have helped scientists generate key insights into the disease and a broad understanding of why people may develop PD. These results will need to be replicated in other populations.

More Science News on [PDF.org](http://www.pdf.org)

- [Ultrasound Test May Predict Parkinson's Risk](#)
- [Seeing a Neurologist May Boost Parkinson's Survival and Quality of Life](#)

www.pdf.org/science_news

* The two science stories in this issue of News & Review are abbreviated. See full stories online.

A Note to My Friends About Parkinson's

By Peter Gall

Dear Friends,

My family and I traveled widely during my journalistic career, as far afield as Moscow and Singapore. We did a good job of staying in touch with you and other friends we made along the way. But my retirement in Minneapolis coincided with a diagnosis of Parkinson's disease (PD). In the early years, it did not affect my social life much. But as time went on, my gestures became more exaggerated and my gait more awkward.

What to do? I did not want to lose you and my other friends right at the time I needed you

"I decided to write you this letter to reassure you."

Peter Gall



most. I did not want you to be apprehensive, either. So I decided to write this letter, to reassure you.

Parkinson's is really a collection of symptoms, not all of which are exhibited in every case. Most of them have to do with our inability to control our personal locomotion system. We command our brain to take a step, and the brain responds, "Good luck!" One PD friend falls so often that he routinely wears knee and elbow pads.

I have fallen only a few times over the past year, but I frequently get frozen in place. At times, I have had to stand in the middle of a dark room until my brain (or my wife) was able to release me.

And when we do move, we sometimes find ourselves starting by taking tiny stutter steps that look like a bad tap dance. My wife is always calling out "Take big steps!" Other symptoms include rigidity, flailing of arms and, in my case, a clenching of muscles in my legs.

Tremors, a symptom shared by all of us, are an early PD sign. Sipping soup can be a sloppy challenge.

Though the degenerative disease itself is incurable, its symptoms can be alleviated by an array of drugs and surgical interventions. We talk of being "on" and "off", like a light switch. When on, following a dose of my prescribed medication, I can do many of the things that I have always enjoyed. When off, I can be a real mess. For one thing, I am weaker, so I find myself needing support from my wife, from a waiter, or from a nearby friend.

Every three hours my timer sounds, and I take my pills. These wear off before the next ones kick in. That can mean a wait for at least 40 minutes in off position. I try to schedule big events for the times when I know I will be on. While off, I will read a novel, nap or watch TV.

If you see me lurch, it is not the devil drink; it is the PD that has disturbed my balance. That same PD also weakens my confidence that I won't misstep, or fall and hurt myself and others. I will go up an escalator but not down, for fear of pitching head over heels.

A particularly distressing feature of PD for many of us is that our memory and other cognitive skills may fade as the disease progresses. I'm now in the category known as "mild cognitive impairment." We are urged to keep verbal skills alive by doing crosswords and playing complex board games. Battle Ship, anyone?

The side effects of PD drugs run the gamut from drooling, to "neurosensory problems" (pain), to depression, to hallucinations. (I used to have a llama visiting me nightly, until medicine sent him packing.)

But not all PD treatment is pill-popping. One effective non-medicinal measure is exercise — in my case, swimming. Exercise helps to counteract the weakness apparent during off periods. It can also help ease the tightness of muscle and tendon that bedevil most of us.

One thing I have found is that attitude counts. We seek out friends and groups that can help to keep us as "normal" as possible. Fortunately, my friends have a good sense of humor, as well as the strength to help me out of a deep, soft sofa — or a deep funk! Thank you, my friends; I can tell that llamas at midnight and people stuck in doorways hold no terrors for you!

Mr. Gall is a writer and journalist from Minnesota.

November is National Family Caregivers Month

As an endorser of National Family Caregivers Month, PDF recognizes the contributions of care partners and family members of people with Parkinson's. We commit ourselves to thanking, supporting, educating and empowering family care partners. Look for details on PDF's online seminar for care partners in November.

www.pdf.org/parkinsononline



Join the Next Six PD ExpertBriefings

Free interactive educational programs designed for people living with Parkinson's, family members and health care professionals.

Impulsive and Compulsive Behaviors in Parkinson's Disease

Tuesday, September 27, 2011, 1:00 PM ET – 2:00 PM ET
Daniel Weintraub, M.D., University of Pennsylvania
Philadelphia, PA

Caring for a Person with Late-Stage Parkinson's November 2011, Date TBA

In recognition of National Family Caregivers Month

Driving and PD: Balancing Independence and Safety

Tuesday, January 31, 2012, 1:00 PM ET – 2:00 PM ET
Margaret O'Connor, Ph.D., A.B.P.P., and Lissa Robins
Kapust, L.I.C.S.W., Beth Israel Deaconess Medical
Center, Boston, MA

A Closer Look at Anxiety and Depression in PD

Tuesday, March 6, 2012, 1:00 PM ET – 2:00 PM ET
Laura Marsh, M.D., Michael E. DeBakey Veterans
Affairs Medical Center and Baylor College of
Medicine, Houston, TX

Parkinson's Medications: Today and Tomorrow

Tuesday, April 17, 2012, 1:00 PM ET – 2:00 PM ET
Cynthia L. Comella, M.D., F.A.A.N., Rush University
Medical Center, Chicago, IL

Understanding the Progression of Parkinson's


Tuesday, June 26, 2012, 1:00 PM ET – 2:00 PM ET
Ronald F. Pfeiffer, M.D., University of Tennessee
Health Science Center, Memphis, TN

Pre-registration is recommended:

By Phone: Phone participants will receive a unique number and pass code to use on the day of the seminar.

By Computer: Online participants will receive tips for testing their computers.

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This series is made possible by an educational grant from Teva Neuroscience.

(800) 457-6676 | www.pdf.org/parkinsononline | info@pdf.org



PDF CHAMPIONS

Pro-Am, raising a gross total of \$60,000. Guests included the friends and family of Lenny Zwick, who lived with Parkinson's for 25 years and was an avid golfer and club member. The Pro-Am featured 18 holes, a luncheon, a silent auction and an awards dinner.

Mr. Zwick's wife Susan, daughter Stacey, event organizer Dave Melillo, and golf pro Jim Hanlon thanked the dedicated supporters who return year in and year out to remember Lenny and find a cure for Parkinson's. Mrs. Zwick said, "I can still remember how [Lenny's] face lit up when we brought him through that door for the first Pro-Am. Five years later, I cannot thank you enough for your continued support."



Golfing for a Cure

On June 20, more than 120 people gathered for the 6th Annual Pilling Miller Tarallo, LLP, (PMT) Golf Outing at New York Country Club, in New Hempstead, NY, raising more than \$10,000 for Parkinson's research.

Guests enjoyed 18 holes of golf. Organizers Debra Castiglione and Jeff Miller left no stone unturned in their planning. Fundraising efforts included tee sponsorship (all 18 sold), raffles, a 50/50 and silent auction. Football player Sean Landeta of the New York Giants was on hand to lend support. The club donated its course for a day, while the firm covered several costs, so *all* monies raised could support research.

Two months later, on August 10, 100 golfers gathered at the Farms Country Club in Wallingford, CT, for the Fifth Annual Zwick



PDF CHAMPIONS

She said, "My grandfather had Parkinson's late in his life and my mother currently struggles with it, so the fight against Parkinson's is close to my heart. I'm grateful for the funds I was able to raise for PDF with the support of my dear family and friends."

Philadelphia Resident Climbs Mt. Kilimanjaro for Parkinson's

In late June, Philadelphia, PA, resident Rachel Isenberg climbed Mount Kilimanjaro, in northeastern Tanzania — the highest mountain in Africa — to benefit the research programs of the Parkinson's Disease Foundation (PDF) with more than \$3,500.

An instructor in English as a Second Language and a tennis professional, Ms. Isenberg first raised funds for PDF's programs in 2010 by running a half marathon in Philadelphia. This year, joined by a college friend, she completed her climb over five days. The pair traveled through rainforest and tundra and climbed through the night. Ms. Isenberg received donations from friends and family to her personal webpage on www.pdf.org, all of which will support PDF's programs.

Community Events |

October

PDF Champs: Stand Up to Parkinson's Race

Date: Saturday, October 22
Place: Newport Beach, CA

Join PDF Champion and paddleboard racer Pamela Strom at this event to benefit PDF's research programs. The event is free and open to all spectators and \$40 for adult racers.

(800) 457-6676
<http://support.pdf.org/standuptoparkinsonsrace>

November

Night of a Thousand Stars Gala

Date: Saturday, November 5
Place: Commerce Township, MI

An evening of food, entertainment, and a silent auction, to benefit the Michigan Parkinson Foundation.

(248) 433-1011
www.parkinsonsmi.org

7th Annual HOPE Conference

Date: Saturday, October 29
Place: Seattle, WA

The Northwest Parkinson's Foundation (NWPF) and the Washington State chapter of the American Parkinson Disease Association (APDA) invite you to this day-long educational conference on Parkinson's.

(206) 748-9481
info@nwpf.org
www.nwpf.org

Carnival at the Copa

Date: Monday, November 14
Time: 6:30 PM – 10:00 PM
Place: Copacabana, New York, NY

Enjoy live entertainment, open bar, dinner, dancing, silent and live auctions to benefit PDF's research programs.

(800) 457-6676
www.pdf.org/copa

December

 PDF Event

PDF Champs: Music for Parkinson's

Date: Sunday, December 4
Place: Rye, NY

Join PDF advisory council member David Eger, Ph.D., and friends for an afternoon of chamber music followed by a wine and cheese reception. All funds benefit PDF's research programs.

(800) 457-6676
www.pdf.org

Save the Date

Third World Parkinson Congress

Date: Tuesday, October 1 – Friday, October 4, 2013
Place: Montreal, Canada

Join the Parkinson's community for this international scientific forum.

www.worldpdccongress.org

More Events pdf.org/event_calendar

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