

VIEWPOINTS



Summer 2025

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by Parkinson Society
British Columbia

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Your support is essential.

Parkinson Society BC would not exist without the support of our members, donors, and volunteers.

OUR MISSION

Parkinson Society British Columbia exists to empower people with Parkinson's in British Columbia through providing resources and services to enable self-management, self-reliance, and self-advocacy.

Here are a few of the ways you can support the Society:

MEMBERSHIP

For an annual fee of \$25, your household benefits from unlimited access to our education and support services, events, and resources.

DONATIONS

Contact us to set up monthly, quarterly or annual donations, or think of us when giving through United Way.

PLANNED GIVING & BEQUESTS

Consider Parkinson Society BC as a beneficiary in your will.

FUNDRAISING

Become a Champion for Parkinson's by organizing your own event benefiting the Society. For more information on how you can support us, visit www.parkinson.bc.ca/donate.

SUPPORT GROUPS

100 Mile House, Abbotsford, Advanced Carepartner Online, Burnaby, Campbell River, Carepartner Bereavement Online, Chilliwack, Chinese Speaking (Burnaby), Courtenay/Comox Valley, Cranbrook, Deep Brain Stimulation, Duncan/Cowichan Valley, Early-Mid Stage Carepartner Online, Gabriola Island, Kamloops, Kelowna, Kelowna Carepartners, Langley, Langley YOPD, Maple Ridge/Pitt Meadows, Maple Ridge Caregivers, Nanaimo, New Diagnosis, New Westminster, North Shore, Parkinson's Disease Online, Parksville/Qualicum, Parksville/Qualicum Caregivers, Powell River, Prince George, Quesnel, Richmond, Sechelt/Sunshine Coast, Solo PD, South Asian Online, South Delta, South Okanagan, Surrey, Trail/Castlegar, Tri Cities/While Rock, Vancouver Carepartners, Vancouver Downtown, Vernon, Women Living with PD, Young Onset Parkinson's Online

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Research

Organelle signaling in stem cell identity specification



RESEARCHER

Dr. Lisa Julian, Simon Fraser University

FUNDING AMOUNT

Scholar Award, \$112,500 over 5 years (co-funded through a partnership between Michael Smith Health Research BC and Parkinson Society BC)

Dr. Lisa Julian studies how genetic mutations that cause disease, particularly those that lead to rare cancers and neurodegenerative disorders, affect the form and function of the brain. Specifically, her lab at Simon Fraser University in Vancouver is dedicated to understanding how genetic diseases impact the human brain as it first develops. Since our brains are so complex and inaccessible, it seems like an impossible task to study them; yet her group is able to address these questions by producing and growing miniature brain tissues in the lab, impressively from stem cells that are derived from actual human patients.

Their work to date has harnessed these miniature brain models and developed new technologies that allow them to reproducibly analyze the brain in its earliest form, as it develops into a small and primitive neural tube. Surprisingly, their analyses revealed that cellular organelles called lysosomes and pathways that regulate protein and metabolic signaling are heavily altered by rare disease mutations during this critical stage. The overall size of the brain and the cell types produced are also heavily affected. Thus, what their findings have suggested is that mutations that lead to neurodegeneration, and conversely rare low-grade tumour development, impact the brain as soon as it starts to form.

Altered protein homeostasis and metabolic processing are known to occur in degenerative brain disease like Parkinson's and Alzheimer's disease and are hypothesized to underlie the eventual loss of neurons in affected patients. However, Dr. Julian's work has opened uncharted territory by revealing that these processes are altered during the earliest stage of brain formation and that they may set the stage for the development of abnormal neural networks and eventual neuron degeneration, well before clinical features are apparent in patients.

Dr. Julian grew up in Ontario, Canada and moved to BC to open her research lab five years ago, with the intent of uncovering critical mechanisms that underlie the pathology of rare brain diseases. She is thrilled with her lab's successes to date and looks forward to deepening their research into altered protein and metabolic signaling in the brain to uncover new therapeutic avenues to help prevent and reverse the neurodegenerative process.

Ask an Expert

Dr. Caroline Paquette discusses fatigue in people with Parkinson's



Dr. Caroline Paquette is a kinesiologist specializing in motor control, with a focus on balance and locomotion, and is the director of the Human Brain Control of Locomotion laboratory at

McGill University. Her work integrates biomechanics, non-invasive brain stimulation, and brain imaging to better understand how our brain controls balance and locomotion. Her work also aims to advance our understanding of walking to inform clinical therapeutic alternatives to improve or maintain mobility in people with Parkinson's disease (PD).

The research team directly involved on this project described below includes PhD student Jordan Bedime, MSc student Sara Perfetto, and key co-investigators Alexandra Potvin-Desrochers and Audrey Parent. All these individuals have a strong research interest in Parkinson's and are instrumental to this project.

Can you tell us about your research focusing on fatigue and gait in Parkinson's disease?

Fatigue is frequently reported in patients with PD. It is a non-motor symptom that interferes with daily mobility and can reduce quality of life. Fatigue is not a simple symptom and includes physical, cognitive, and emotional symptoms. It is thought that in individuals with PD and fatigue, the limbic system (a group of brain structures that primarily control emotions, memories, and motivations) might send signals to the basal ganglia (a group of brain structures that help regulate movement, balance, and learning) that interfere with its function.

In fact, when imaging the brain while the person is at rest, areas involved in motor function, in addition to limbic and attentional networks, are associated with fatigue in people with PD.

These findings suggest that movements that require coordination, attention, and continuous adjustments, such as walking, could be more challenging for individuals with fatigue.

While we know that difficulties with walking in PD have been associated with the perception of fatigue, we wanted to determine how fatigue is associated with how we walk (not just at rest!). By better understanding the factors at play, these findings might inform interventions to minimize the impact of fatigue on mobility in PD.

For this study titled '*Influence of fatigue in Parkinson's disease on gait performance and locomotor control mechanism*', we recruited two groups of individuals with PD: one group who reported experiencing fatigue, and one group who did not. All participants wore an activity tracker for five days during the day to measure their physical activity level, and at night to monitor sleep.

The participants underwent two sessions of a special type of scan called 18F-FDG PET to measure brain activity related to walking. The scans were taken during two tasks for both groups: walking in a straight line and making a complex turn. Motion sensors were used to evaluate how fatigue affects gait performance during simple and complex walking. Finally, we also conducted interviews with the individuals who reported fatigue to explore the complexity of fatigue symptoms.

Our preliminary findings suggest patterns of brain activity differ between people who did and did not report fatigue. These differences were noticeable during simple straight walking but became much more similar during a complex task that involved walking and steering around cones.

In fact, during simple straight walking, people with fatigue activated more areas of the brain associated with what is called the default mode network (a set of regions that are normally active when we are at rest and not engaged in a task) compared to the complex walking task. This might suggest that during a simple task, people with fatigue increase their internal focus.

What were the findings of your study? What was the most surprising finding for you?

Data collection for this project ended in June 2024 and we are still in the process of analysis. What we are observing is that the brains of individuals with PD who have fatigue seem to activate brain regions differently than those who do not experience fatigue. This suggests that fatigue affects our mobility directly by changing the way we recruit our brain circuits for walking.

These differences in brain activity patterns seem to indicate dysfunction in key brain regions, such as the frontoparietal, limbic, and temporal, potentially involving attention and emotional processes. Indeed, increased activity in key regions of the default mode network may suggest heightened internal thought processes and/or increased attention to oneself during straight walking, as opposed to a more external and goal-oriented attention to the task being performed.

We are currently analyzing physical activity and sleep data to determine whether there are specific patterns associated with fatigue and mobility in day-to-day living.

We will also be comparing interview results from people with fatigue to their brain activity during the walking tasks, as well as their physical activity and sleep data, to better understand whether specific aspects of fatigue relate to certain brain patterns. For example, is emotional fatigue associated with specific brain activations?

What role do you think technology, like activity trackers or motion sensors, plays in advancing research on PD symptoms?

We believe they play a very important role by allowing us to quantify individuals' experiences in their day-to-day environment. People with PD tend to behave very differently in laboratory settings compared to their usual surroundings. For example, they may experience more symptoms at home compared to the lab. With motion monitors, we are now able to better understand movement and sleep in the home setting compared to when we conduct assessments in the lab.

The other advantage is that we can also monitor individuals over longer periods, providing a much more accurate picture of their symptoms. Finally, these tools can likely help monitor disease progression in the future and help adjust interventions.

What motivated you to focus on fatigue in Parkinson's for this study?

We were interested in better understanding how fatigue manifests and impacts movement – especially mobility – and how the brain activates movement. One novel aspect of our study is analyzing individual interviews with participants experiencing fatigue and combining their perceptions with more objective measurements obtained from quantifying walking, brain activity, and sleep.

How can studies like yours improve quality of life for people with PD?

A strong advantage of our project is that we are using what we call a mixed-method design where we, as described in the questions above, use subjective/qualitative data (ie: interviews) from individuals who experience fatigue and analyze those with more traditional objective/quantitative data (ie: physical activity and sleep data). This allows us to document recurring themes and the breadth of experiences, while exploring whether any specific symptom might be more strongly associated with observable measures of fatigue. For a symptom such as fatigue that is quite broad and complex, this is a very relevant design that brings the patient experience front and center. Of course, these interviews on their own are very rich and are helping us identify the most commonly used or most helpful coping techniques, and may help people with PD identify triggers of fatigue.

Fatigue and its underlying causes in PD are still poorly understood. Why do you think that is?

Fatigue is a complex symptom that cuts across several domains. It can be physical, emotional, or cognitive. We are getting better at defining and describing fatigue in PD. As a result, we are also better at measuring and quantifying fatigue, yet more progress is needed, and likely coming.

In your experience, what misconceptions do people have about fatigue in Parkinson's disease?

It sometimes seemed to be challenging for our participants to differentiate between fatigue versus general tiredness. Another general misconception could also be that fatigue prevents you from doing activities and enjoying life, but all of our participants are still very active, attend social events, do sports, etc. It seems that they may need to find strategies to better live with fatigue. In some cases, we heard that fatigue is present but is not exacerbated by physical activity, suggesting that it is possible to feel the benefits of physical activity without exacerbating fatigue.

Has your research helped reveal any strategies people with PD can use to reduce fatigue while moving and walking?

We found that there is a very wide range of strategies, and individuals with fatigue should really try different ones to find those that best suit them. The most frequent strategies we heard from participants with fatigue are:

- Take breaks, as needed, to recover from fatigue episodes. Nap, sit down, etc.
- Do physical activity and stay active!
- Plan your activities ahead based on the time you feel more energized (seems to be most often in the morning)
- Break down tasks into smaller components
- Adjust your diet by eating less added sugar, more fruits, veggies, and things that are easy to digest
- Tell people around you when you experience fatigue, and accept help if needed
- Do the activities you enjoy, or enjoy the activities you do

What advice would you give to people with PD and their caregivers for managing fatigue in daily life?

We would encourage individuals to take time to recognize fatigue triggers, times with the most fatigue, how long it takes to recover, etc. through journaling. Understanding their own triggers should help people with Parkinson's better determine which strategies to use. Consider disclosing fatigue to people who live with you as it might help them understand how you are feeling.



Living Well

Women and Parkinson's

Parkinson's disease (PD) affects both men and women, but the experiences of women have been underrepresented in research and care practices. Women with PD often face unique challenges, such as delays in diagnosis, differences in symptom progression, and being more likely to take on caregiving roles, which can impact their health and quality of life. Despite these disparities, research on the experiences of women with PD remains limited, and even less attention is given to how other aspects of identity, such as race or sexual orientation, intersect with these challenges.

BIASES IN RESEARCH

Despite women being a large portion of the PD population, studies examining sex differences in Parkinson's have been overwhelmingly sparse (Cerri et al., 2019). However, scientists have finally started to recognize that biological sex plays a large role in how severe Parkinson's disease can be. In 2015, the National Institutes of Health (NIH) stated that sex should be treated as a key factor in research, yet many studies continue to overlook or fail to prioritize these differences (Ferreira et al., 2022).

DEVELOPMENT AND DIAGNOSIS OF PD

Biological sex, alongside other factors like environment, genetics, and age, influences the development of Parkinson's. Men are twice as likely to develop PD than woman, for a variety of reasons that are not fully understood yet (Cerri et al., 2019). However, one explanation for this might be the role of estrogen: some studies have shown that this hormone seems to protect the part of the brain affected by Parkinson's disease. In animal studies, estrogen affects how dopamine is made, used, and processed, and may also influence how dopamine receptors work (Shulman, 2002). In fact, PD rates in women go up a lot after menopause, which is characterized

by a large drop in estrogen production. This further suggests a potentially protective role for estrogen, though more human studies are needed to fully understand this relationship (Makav & Eroğlu, 2021).

When it comes to receiving a Parkinson's disease diagnosis, women unsurprisingly face challenges (Parkinson's Foundation, n.d.). Because the stereotype of Parkinson's as an 'old white man' disease is so pervasive, it seems that physicians have internalized it, leading to delays in women getting diagnosed. However, some contributing factors may also stem from women themselves, such as a reduced likelihood of disclosing or emphasizing bothersome symptoms during medical appointments (Subramanian et al., 2022).

SYMPTOMS OF PD

Research shows that symptoms and treatment responses can differ significantly between women and men. The chart below highlights some of the key differences (Cerri et al., 2019 & Subramanian et al., 2022):

WOMEN

- Tend to experience faster progression of PD
- Tremor is often the first noticeable symptom
- Motor symptoms emerge later
- Higher risk of levodopa side effects (e.g., dyskinesia)
- **More severe non-motor symptoms:**
 - Anxiety, depression
 - Fatigue, pain, constipation, and bladder issues
 - Sleep issues, apathy, and excessive sweating
- Greater facial masking (hypomimia) leading to increased stigma
- Experience more postural instability
- Have higher levels of osteoporosis

MEN

- More likely to have cognitive impairments (e.g., decline, hallucinations)
- More likely to experience REM sleep behaviour
- Report more sexual dysfunction (may be underreported in women)
- More prone to impulse control issues (e.g., hypersexuality, gambling)

Furthermore, symptoms will change during the menstrual, pregnancy, and perimenopausal/postmenopausal stages of a woman's life:

MENSTRUAL:

- Women experience worsening of PD symptoms before their monthly menstrual period (*Parkinson's Foundation, 2022*)
- Parkinson's medication may be less effective, resulting in more 'off' periods (*Davis Phinney Foundation, 2022*)

PREGNANCY:

- The good news is that women with Parkinson's do not have a higher risk of complications during pregnancy or childbirth
- While some PD symptoms, like balance issues, fatigue, slowness, and nausea, can impact pregnancy and be affected by it in return, these issues typically are not serious or life-threatening
- Commonly used PD medications, like levodopa, have been taken during pregnancy without reports of harmful side effects (*Odin, 2018*)

PERIMENOPAUSE/POSTMENOPAUSE:

- Many women report an increase in Parkinson's symptoms after menopause, specifically worsening of fatigue, urinary tract problems, bradykinesia (slowness of movement), and tremor
- Menopause can also change the effectiveness of PD medications
- Fortunately, hormone replacement therapy (HRT) is safe, effective, and appropriate for women with PD, even if PD-specific research is limited on the topic (*Lewis, 2024*)
- Pelvic floor problems, such as incontinence, can also worsen in the perimenopausal and postmenopausal period, especially for women with Parkinson's, so it is important to speak with a pelvic floor physiotherapist for guidance and education (*Subramanian et al., 2022*)

TREATMENT

Unfortunately, studies have shown that when compared to their male counterparts, women with PD are more likely to receive lower-quality healthcare. Following on this disparity, research has also found that women are less likely to be referred for advanced treatments, such as Deep Brain Stimulation (DBS), even when they meet the clinical criteria (*Parkinson's Foundation, n.d.*). In fact, women only make up 25% of those referred for DBS. This is particularly concerning, because women report greater increases in quality of life, including improvements in mobility and cognition, from treatments like DBS when compared to men (*Subramanian et al., 2022*).

Building on this, research also shows that even when women are identified as suitable candidates for advanced therapies, they are still less likely to undergo the procedure. This appears to be driven not only by systemic factors, such as physician biases, but also by personal and psychological considerations, including a greater fear of surgery, higher rates of depression, and a more hesitant, socially influenced decision-making process among women compared to men (*Maccarrone et al., 2024*).

While it might seem reasonable to assume that fewer women are referred for advanced therapies simply because Parkinson's is more prevalent in men, research shows that the gender gap in access persists even after accounting for that difference. Studies have found that women still receive less care, despite no significant differences in clinical variables like age, disease duration, symptom severity, or medication levels (*Maccarrone et al., 2024*).

CARE: GIVING AND RECEIVING

Women, more commonly than men, assume caregiver roles especially in midlife, and often experience more distress when they fall short of fulfilling their responsibilities. These roles span from family to career, and can be very demanding. Though the sample was small and region-specific, a study in Brazil looked

at women with PD and found that despite their disease, women continued their occupational and domestic caregiving roles. In contrast, men appeared to struggle more with adapting to the limitations brought on by their disease (*Subramanian et al., 2022*).

Sadly, women with Parkinson's usually have less social support, leading to psychological distress and reduced quality of life. Additionally, women who see themselves as caregivers in any capacity are more likely to experience poorer health outcomes, face barriers to accessing necessary medical care, and report higher levels of depression. And because of the gender divide of giving and receiving care, women with Parkinson's disease are twice as likely to report paying for care compared to men (*Subramanian et al., 2022*). Women's longer life expectancy and their tendency to prioritize giving care over receiving it – even when support is present – may help explain this discrepancy (*Cerri et al., 2019*).

INTERSECTIONAL BARRIERS IN PARKINSON'S CARE

The experience of Parkinson's disease is not just shaped by biological sex; it is also deeply influenced by an individual's intersecting identities, such as sexual orientation and race, which can impact everything from access to care to the social and emotional toll of the disease.

Most of the research on differences between men and women relating to PD has focused on biology, with not enough emphasis on the psychosocial context (the influence of psychological and social factors on someone's wellbeing), which is known to affect care and quality of life (*Subramanian et al., 2022*).

While little is known about women in the LGBTQIA+ community in the context of Parkinson's, studies do show that older LGBTQIA+ individuals report significant stigma from healthcare providers, with 33% stating they have mistrust of the medical system because of discrimination (*Subramanian et al., 2022*).

Furthermore, racial differences exist in the diagnosis, treatment, and research of Parkinson's disease. In particular, limited research participation and representation results in a limited understanding of the disease, which hinders the development of evidence-based treatments for diverse populations (*Aamodt et al., 2023*).

Diagnoses of PD may also be delayed or missed in those from minority groups due to a variety of reasons, including biases, mistrust of the medical system, and other barriers that prevent those individuals from seeking care (*Aamodt et al., 2023*).

When it comes to treatment, biases continue to influence the care patients receive. Black individuals with Parkinson's are less likely to receive DBS than their white counterparts, with women from non-white racial backgrounds being even less likely to undergo the procedure compared to men from the same racial groups (*Cramer, 2022*).

There's a clear need to bring intersectionality into public health and research, so we can better understand and support women with Parkinson's who also face other forms of marginalization, and make sure they receive the inclusive, high-quality care they deserve.

HOW PARKINSON SOCIETY BC CAN HELP

Parkinson Society BC (PSBC) is proud to serve a diverse community of women with Parkinson's by challenging stigma, advocating for more inclusive care, and providing support.

Here are some of the ways women with PD can count on us:

- **Comprehensive awareness campaigns:** We are working to dispel the myth that Parkinson's only affects older men through our many awareness campaigns, which have featured women front and centre. By educating the public and amplifying the voices of women living with PD, we aim to dismantle outdated stereotypes.

- **Healthcare professional outreach:** We also engage directly with physicians and healthcare professionals to improve their understanding of how Parkinson's presents in women, and how to recognize and respond to their unique needs.
- **Professional and peer support for women:** Additionally, PSBC offers counseling services tailored specifically for women with Parkinson's, providing them with a safe space to navigate the emotional and psychological challenges of their disease. To learn more, please visit www.parkinson.bc.ca/counselling. We are also pleased to offer a Women Living with PD support group that meets online every month. For more information, see www.parkinson.bc.ca/supportgroups.

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Annual Report

2024



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Our Mission

Empower people with Parkinson's in British Columbia by providing resources and services to enable self-management, self-reliance, and self-advocacy.

Parkinson's Disease

Parkinson's disease is caused by a loss of dopamine in the brain and is the second most common chronic neurodegenerative disorder after Alzheimer's disease. Both motor and non-motor symptoms may be experienced, such as tremor, rigidity, slowness of movement, difficulty with speech, sleep disturbance and mood disorders. There is currently no known cure.

It is estimated that there are approximately 17,500 individuals living with Parkinson's in British Columbia. While the vast majority of people with Parkinson's are over 60, 20% are diagnosed before the age of 50 and many are in their 30s and 40s.

Executive Message

Dear Friends of Parkinson Society BC,

This past year marked a time of change and continued commitment for Parkinson Society British Columbia (PSBC). We said farewell to our long-time Chief Executive Officer (CEO), Jean Blake, and welcomed her successor, Joanne Baker. We also relocated our offices a few blocks west to a new space on West Hastings Street. Amidst these changes, our investment in the healthcare system and research remains constant. At the same time, our dedicated team of staff and volunteers continues to deliver the programs and services that so many in our community value and rely on.

SUPPORTING ACCESS TO HEALTHCARE

We have continued to provide financial support to four movement disorders clinics across the province to increase access to allied health professionals, including speech-language pathologists, physiotherapists, occupational therapists, and social workers. This \$2 million investment over eight years reflects the importance of multi-disciplinary care for those living with Parkinson's disease and employs an innovative incentive approach to encourage health authorities to continue to sustain these positions beyond the term of our funding.

We also continue to advocate for timely, equitable access to new medications. In 2024, we were pleased to see Vyalev™, a subcutaneous infusion therapy, included on BC's PharmaCare Formulary.

ADVANCING RESEARCH

Funding research that is focused on understanding the causes, providing more effective treatments, and finding a cure remains a priority for the Society. In 2024, our investment of more than \$360,000 in research partnerships with Michael Smith Health Research BC and the Parkinson Canada Research Program helped build capacity among the next generation of researchers and contributed to greater understanding of this complex disease.

DELIVERING PROGRAMS AND SERVICES

Our Counselling & Healthcare Navigation service, activity and exercise programs, and virtual physiotherapy continue to be offered free of charge and are well-utilized by our community. Our provincial network of more than 50 support groups, powered by some of the most committed and informed volunteers, ensures that British Columbians living with Parkinson's disease have a strong sense of connection and community.

ACKNOWLEDGEMENTS AND LOOKING AHEAD

We are deeply grateful for the ongoing dedication and support of our volunteers, donors, staff, and the broader community. Quite simply, we would not exist, and could not do what we do, without you! There remains much work ahead. Our advocacy for more timely access to Deep Brain Stimulation surgery continues, as does our call for better access to movement disorders specialists in rural and remote areas of the province.

Thank you for helping us continue to support and uplift the Parkinson's community in British Columbia. Our goal is that every person touched by this disease has access to the information and services they need to live life to the fullest.

With gratitude,

Joanne Baker

CEO



Andrew Davenport

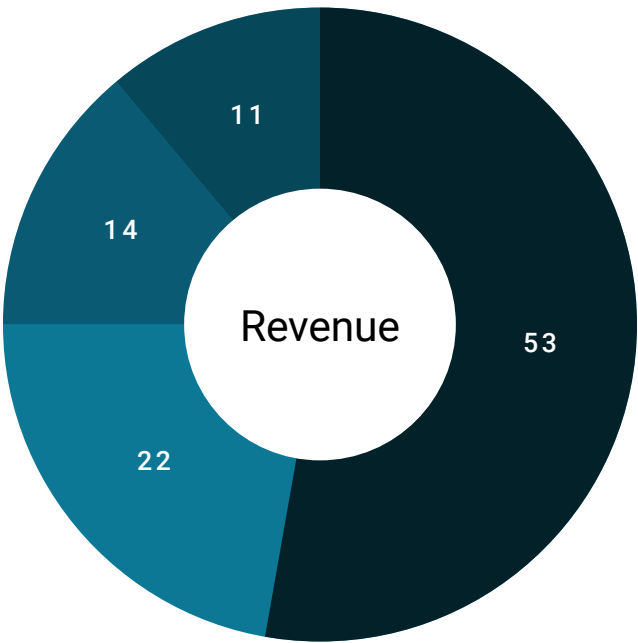
Chair



Message from our Finance Committee

The Society enters 2025 with reserves equal to two (2) years of its historical expenses, which provides the Society with further opportunity to increase its impact and reach throughout BC.

To view a copy of our audited 2024 Financial Statements, please visit www.parkinson.bc.ca.

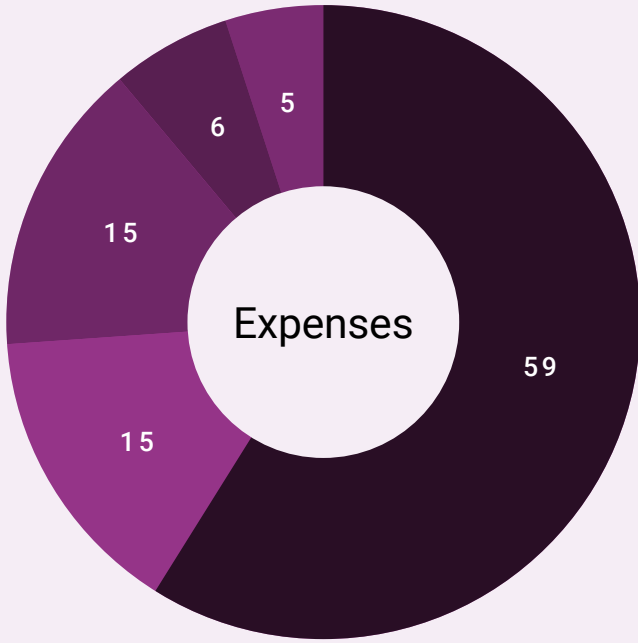


53%
Bequests \$1,973,715

22%
Donations \$819,553

14%
Investments & Other \$507,139

11%
Special Events \$431,798



59%
Support Services \$1,389,613

15%
Fundraising \$368,777

15%
Research \$354,566

6%
Public Awareness, Communication, & Advocacy \$147,055

5%
Governance & Administration \$114,248

Words from Our Community

Parkinson Society British Columbia relies solely on donations to provide life-changing support, deliver essential resources, and connect people affected by Parkinson's disease. Your gift impacts individuals and families across the province, giving them hope, strength, and the tools they need to face Parkinson's with resilience. See how supporters made a difference in 2024.

"When Gary was diagnosed, the next day, I contacted Parkinson Society BC [...] They were open and listening. They first sent out a package of information material. We became members. We started reading Viewpoints. I started going to events, meeting other people with Parkinson's and their caregivers. I love going to SuperWalk every year. They know what you're going through or they understand it. If it wasn't for the Society, I don't know what we would have done."

Sandra Alexander, Carepartner & SuperWalk volunteer



"I got connected to Parkinson Society BC through my good friend. In terms of support groups, there is currently a Young Onset Parkinson's Group. We all share this common trait, but you also get to compare notes, and you basically give each other hope and motivation and inspiration."

Jim Wu, Person living with Parkinson's & Parkinson Society BC Board Member



"I think it's very important for people to connect with Parkinson Society BC, because they give the resources. [Without them] I would not know about Parkinson SuperWalk, and SuperWalk gave me a goal to always train for. They [also] offered therapy for my husband and I that helped to get us through all those rough spots."

Jeanette Fisher Pynn, Person living with Parkinson's and Deep Brain Stimulation recipient



Investing in Research

Parkinson Society British Columbia (PSBC) proudly invests in research that advances understanding, improves care, and moves us closer to a cure for Parkinson's disease. Through direct funding and strategic partnerships — including with the Parkinson Canada Research Program and Michael Smith Health Research BC — we support clinical studies, pilot projects, fellowships, and innovative research that address the needs of people living with Parkinson's in BC and beyond.

FUNDED THROUGH THE PARKINSON CANADA RESEARCH PROGRAM

Connor Bevington

University of British Columbia

Effects of exercise on brain energetics in Parkinson's disease.

Priti Gros

University of Toronto

Measuring disease progression in Parkinson's disease using administrative health data.

Kathryn Lambert

University of Alberta

Examining the time course of movement programming deficits in parkinson's disease: An electroencephalographic investigation.

Joyce (Sze Tung) Lam

University of British Columbia

Treating anxiety in Parkinson's disease with a multi-strain probiotic – A randomized, controlled trial.

Stefan Lang

University of British Columbia

Network signatures of non-motor symptom outcomes following Deep Brain Stimulation in Parkinson's disease.

Martin McKeown

University of British Columbia

An individualized Multi-modal approach for detection of medication "off" episodes in Parkinson's Disease via wearable sensors.

Ali Salahpour

University of Toronto

Cannabinoid compounds to augment L-DOPA treatment and prevent L-DOPA-induced dyskinesia.

Brendan Santyr

University of Toronto

Using fMRI to optimize Deep Brain Stimulation settings post-surgery and reduce adjustment time.

Konstantin Senkevich

McGill University

Clinical Movement Disorders Fellowship.

Daryl Wile

Exercise snacks for people with parkinson disease: A pilot randomized controlled trial

FUNDED THROUGH MICHAEL SMITH HEALTH RESEARCH BC

Ifeoluwa Awogbindin

University of Victoria

The impact of SARS-CoV-2-infection/COVID-19 and microglial contribution on the development and severity of Parkinson's disease.

Lisa Julian

Simon Fraser University

Organelle signaling in stem cell identity specification.

Nicholas See

Simon Fraser University

A chemical biology approach to uncovering modulators of a Parkinson's disease-linked protein.

Nika Shakiba

University of British Columbia

Unlocking the competitive potential of pluripotent stem cells: Towards novel stem cell therapeutics.

Anthony Lapansky

University of British Columbia

Coordinating movement in a complex world: How the midbrain and oculomotor cerebellum encode visual motion originating from realistic scenes to guide locomotion.

LOOKING AHEAD

We remain committed to supporting both clinical and translational research that improves the lives of people affected by Parkinson's disease. As new projects are funded, PSBC will continue to share updates, outcomes, and discoveries that reflect the impact of your support — bringing hope and progress to the Parkinson's community.

Our Year in Review

83%

of participants in PSBC's new virtual group cognitive behavioural therapy program reported continued use of strategies to manage Parkinson's and caregiving challenges.



300+

frontline staff trained through 8 Parkinson Ready Vancouver sessions, with the World Parkinson Coalition and PD Avengers, to reduce stigma and improve accessibility in tourism, hospitality, transportation, and emergency services.



355

registrants across 4 regional conferences in BC, showing strong demand for accessible Parkinson's education and support.



3

new specialized support groups launched — South Asian, PD Solo, and Women Living with PD — expanding access to tailored peer support for underserved communities across BC.



500+

volunteer hours contributed to help make Parkinson SuperWalk in BC possible.

1,773+

volunteer hours contributed to Programs & Services, showing the vital role community members play in expanding PSBC's reach across BC.



4

part Parkinson's training series delivered and recorded with Fraser Health to support ongoing staff learning and improve patient care.



19

in-service presentations gave healthcare providers and community groups tools to better support people affected by Parkinson's.



1,057

registrants were drawn in to 19 webinars for 2024, with the top session — *Self-Compassion for Caregivers* — attracting 90 participants.



24

healthcare professionals completed PD Warrior training at workshops in Chilliwack and Prince George, strengthening their ability to support people with Parkinson's.

Special Thanks to Our Supporters

We do our best to ensure each name is accurately listed. Please inform us of any errors at donations@parkinson.bc.ca so we may correctly recognize you in the future.

INDIVIDUAL LEADERSHIP CIRCLE (\$5000+)

Anonymous (5)	Kaufman	John Peirce & Nancy	Sheila Diane Carnegie	Heather Jean McKenzie
Dorothy & Albert Anderson	Linda Leslie	Hetherington-Peirce	Maurice Wilson Gordon Craig	June Ardith Teal
Janice & Rodney Hobbs	Wray McDonnell	Albert Roos & Rosalind Best	Carolyn Eunice Gorman	Verla Ann McClynn
Heather Toews & Andrew	Holly & Chris Parrish	Chris Volland	Margo Louise Jakobsen	

LEGACY GIFTS

INDIVIDUAL BENEFACTORS CIRCLE (\$1000-\$4999)

Anonymous (32)	Ralph & Linda Emsland	Patti Leggett	Jacqueline Ordroneau	Christopher Silvan
Frank Abbott	Murray & Carol Firth	Marna Leslie	Jane Osterloh	Alberta V. Sirosky
Paul Atterton	Jean H. Flintoft	Roberta & Angus Leslie	Lorna Patterson	Bernice & Michael Smerdon
Brian K. Begert	Matthew Freeman	Marian Lewis-Peel	Paul Pearlman & Stephanie	James Smerdon & Deana
Roberta Lando Beiser	Abe & Lillian Friesen	Robin Louis	Soulsby	Grinnell-Smerdon
Jill Boileau	Beverly & Kenneth Gelhorn	Diane Marsh	Leslie Pearson	Martti Solin
Kathryn Bonitz	Janice & Terry Gibbon	Mary E. Martin	Iris Pierrot	Birte Sorensen
Barry & Mary Bowen	Brian W. Gillespie	Bill Mathieson & Meg Clarke	Vicki & Rory Polson	Laurie Stovel
Todd Brown	Tony Dawson	Brian Maunder	Adam Rich	Carey & Tim Struch
Eric Carlson	Kenneth Hamlin &	Barry & Barbara McBride	Ted Rich	Dr. Jennifer L. Takahashi
Emily Chadwick	Anton Tabakov	Alan & Holly Meadows	Gennine Richardson	Tiffany Taylor
Craig Chisholm	Catherine & Gary Harasym	Dorothy Mills	David & Elaine Rickards	Garry & Cheryl Toop
Louise Corbeil	Carolyn Harper	Doug & Brenda Morris	Claire Finch & Steve Russell	John van Dongen
Wilbur & Yvonne Couling	Margaux M. Hennebery	Margaret E. Mutch	The Sangha Family	Monica & Gary Vaughn
Pamela J. Cowan	Eileen Hillyard	Joseph Negraeff	Andrew Scott & Katherine	Erika & Daniel VonBank
Rob & Laura Cruickshank	Mark & Angela Hutchinson	Robin & Judith Nelson	Johnston	Andrea West
Marlene Dick	Ruth & Donald James	Joan Nielsen	Nancy Segsworth	Stan & Tilly Wiebe
Irene Dougans	Darlene Koller	Alison Norman & Brian Pollard	John Sheehan	Daryl Wile
Victor Dyck	Ruth & Alf Konrad	Marilyn & Darcy Olson	Theresa Sheehan & Terry Ellis	Sherri & Julian Zelazny
	Maureen Legg		Laird & Annalee Siemens	

INDIVIDUAL TULIP CIRCLE (\$500-\$999)

Anonymous (101)	Bruce & Delight Dobby	Arne & Pauline Johansen	Roger & Dominique Miller	Kathleen So
Rob Aird	Scott & Judy Drever	Pat & Bryan Kassa	Ernest & Janis Molgat	Marc St. Arnault
Raymond & Doreen Alleen	Marjorie & John Ewacheski	Jeff & Wendy Keeble	Dwight & Heather More	Barry Taylor
Clifford & Carol Anderson	Nigel & Joan Fitzpatrick	Sherry Kennedy	Nick Nurany	Carole Taylor
Wayne & Patricia Babcock	Todd Follett	John King	Fumiko Oguchi-Chen	C. Ann Thomson
Georgina Beddome	Lorne Goldman	John Kot	Rendy & Brian Olthuis	Jasdeep Uppal
Jean Blake	Steve & Lynda Grisack	David & Julie Lloyd	James H. Patterson & Lauren	Idonio Villani
Sheryl Bolton	Sandra Harrison	Barbara Lockyer	Kwan	Ulrika Wallerstein
Susan Borthwick	Deborah & Garry Hartley	Keith & Betty Ann MacInnes	David Probst	Maire & Duncan Watson
Evelyn Bowersock	Hugh Hemphill	Jonathan Mackin	Doug & Lana Pulver	Bryan White & Glennis
Sylvia & Peter Bull	Katharine Hennebery	Ronald MacRae	Dr. Allan Quigley	Davidson-White
David & Debbie Couling	Katharina Huang	Eileen Mate	Deborah & Dave Ralston	Max Whitney
Brenda Dalawrak	Chris Huff	Shirley McGillivray	Dr. Karla Reimer	Malcolm Whittall
Evelyn Davis Johnson	Janice Hulse	Max & Margrit Meier	Patricia Rickards	Paul & Cindy Wiebe
Tony Dawson	Peter M. Jarvis	Ben & Dorothea Meulenbeld	Ed Silva	Faye Wong
			Joan & Richard Smyth	

ORGANIZATION LEADERSHIP CIRCLE (\$5000+)

A&W (Newton/Strawberry Hill, Cloverdale, Surrey/Glenlyon & Burnaby)	Corus Entertainment	Georgia Main Food Group	Parke Pacific Projects Ltd.	Stingray Radio Inc. (Kamloops)
Aldor Acres Ltd.	Eagle Family Fund	Jakobsen Foundation	Raven Foundation	Telus Fully Managed
Aqueduct Foundation	Frances A. McClean & Charles J. McNeely, Jr. IMP Fund, held at Vancouver Foundation	Lewis Family Fund, held at Nicola Wealth Private Giving Foundation	River Foundation	The Alan & Doreen Thompson Charitable Foundation
			Sonrise Foundation	

ORGANIZATION BENEFACTORS CIRCLE (\$1000-\$4999)

BC Interior Community Foundation	Commonwealth Holding Co. Ltd.	Neijmeijer Pappa Foundation	Salmo & District Health Care	The Fograscher Family Fund, held at Nicola Wealth Private Giving Foundation
Better World Fund, held at Vancity Community Foundation	Fraternal Order of Eagles	Pattinson Media (Prince George)	Auxiliary Society	Werner & Helga Hoing Foundation
Bond Repro	Ladies Auxiliary No. 4281	Pekarsky Family Foundation	Smythe LLP	William F. White International Inc.
Boyer-Millar Foundation	Kamloops Parkinson's	Pure Country 105.7 (Vernon)	TELUS	Wilson M. Beck Insurance Services Inc.
Carole & David Muller Family Fund, held at Vancouver Foundation	Awareness Group	RBC Foundation	Telus Foundation	
	Loyal Order of Moose	Royal Canadian Legion	TELUS Friendly Future Foundation	
	Lodge #1552	Branch No. 81		
	Mel & Geri Davis Charitable Trust			



Parkinson SuperWalk returns the weekend of September 6 & 7, 2025

Parkinson SuperWalk is the largest fundraising event for Parkinson Society British Columbia. Each year, thousands of participants walk together in communities across the country to raise awareness, build community, and fund critical programs, services, and advocacy efforts for people affected by Parkinson's disease.

IN-PERSON WALKS ARE PLANNED IN:

- 100 Mile House
- Abbotsford
- Chilliwack
- Kamloops
- Kelowna
- Mid Island (Parksville & Nanaimo)
- New Westminster
- Pitt Meadows / Maple Ridge
- Prince George
- Vancouver
- Vernon
- White Rock / Surrey

Registration opens in June

Learn more at www.parkinson.bc.ca/superwalk



Newsworthy

Upcoming Education & Exercise Events

📍 Events Hosted in Person 🌐 Online Events

Thursdays, June 5 - July 10, 1:00 - 2:00pm

SongShine 🌐 Online

This program harnesses the power of the brain, breath, and emotion to reclaim voices. Joani Bye will engage participants in uplifting sessions of SongShine, a program using singing, breath work, diction, articulation, and creative imagination exercises to strengthen voices affected by Parkinson's.

Thursdays, June 5 - July 24, 5:30 - 6:30pm

Zumba® Gold Seated - Level 1 🌐 Online

Add some music and movement to your day with our Zumba® Gold Seated exercise class. This adapted Zumba class is inclusive of all mobility and balance abilities and introduces easy-to-follow Zumba® choreography. No dance experience is needed and there are no wrong moves!

Saturday and Sunday, June 14 and 15

Penticton Regional Conference 2025

📍 Penticton Lakeside Resort & Conference Centre,
21 Lakeshore Dr W, Penticton, BC

Nestled in the heart of the beautiful Okanagan Valley, this two-day event offers an immersive and interactive experience for people affected by Parkinson's disease. Our regional conferences bring together individuals living with Parkinson's, carepartners, healthcare professionals, and community members from across the province to share knowledge, build connections, and discover practical tools for living well with Parkinson's. Attendees are welcome to attend either day of the conference or both, based on their availability. Member pricing is available.

For registration and a full list of upcoming events, visit us online at www.parkinson.bc.ca/events

Tuesdays, July 15 - August 19, 12:25 - 1:25pm

Rock Steady Boxing w/ Doug - Level 2 🌐 Online

Are you ready... to Rock Steady? Join Doug Pickard, a Rock Steady Boxing Affiliate Owner, who will lead an eight-week fitness boxing class for Parkinson's. Experience a total workout for both mind and body, as this class incorporates cardio, strength, balance, hand-eye coordination, and speed!

Thursdays, September 4 - 25, 11:00am - 12:00pm

September Challenger - Level 3 🌐 Online

Let's get moving! Kick-start the fall season with the September Challenger, a high-intensity and fast-paced exercise class suitable for those who can stand and move unassisted. PSBC's Neuro Physiotherapist, Shelly Yu, will challenge your balance, coordination, and exercise stamina in this fully standing circuit class.

Thank You to Our Fundraisers & Donors



We would like to thank Me-n-Ed's Pizza Parlors for their fundraising efforts during the Sweetheart Pizza Sales in February, which raised \$646. A big thank you also to UBC Project PATHS for their initiative and gift of \$1,900. We look forward to another successful year in 2026 and thank both for their time and gifts!

On March 23, Aldor Acres Family Farm had their annual Parkinson's Awareness Opening Day. Our CEO and Director of Development attended the event, chatting with members of the community, supporters, and even a few goats! We are incredibly grateful for a wonderful opening day at Aldor Acres Family Farm and their generous donation of \$5,100!

Parkinson's Awareness Month

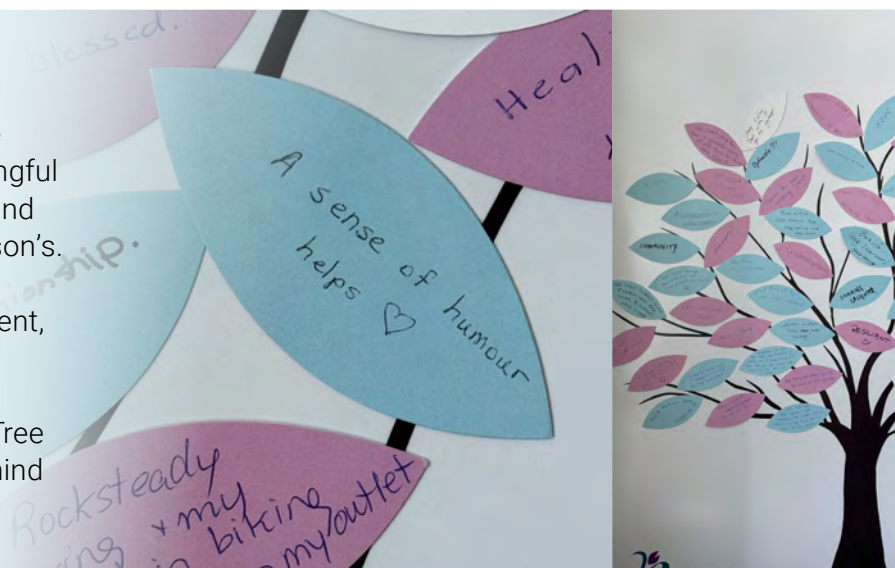
This past April, we marked Parkinson's Awareness Month by sharing stories, resources, and insights into the realities of living with Parkinson's. Thank you to everyone who showed their support! Your involvement helped raise much-needed awareness of the disease's impact across British Columbia.

Learn more about our other campaign highlights at www.parkinson.bc.ca/pam25highlights

Some campaign highlights include:

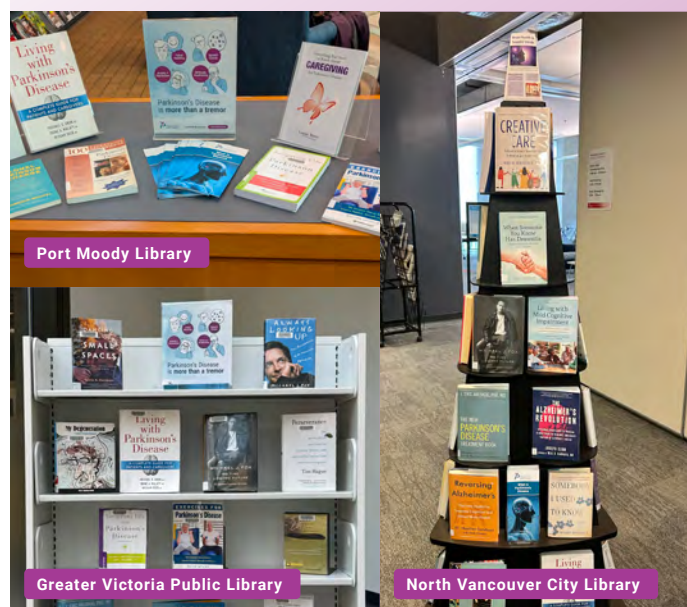
TREE OF HOPE

We invited the community to take part in the Tree of Hope, a meaningful activity celebrating the strength and unity of those affected by Parkinson's. Participants shared messages of hope, gratitude, and encouragement, paying tribute to loved ones and highlighting helpful tips. These contributions were added to the Tree of Hope to inspire others and remind us that we're not alone.



LIBRARY DISPLAYS

Public libraries across the province displayed informational brochures, posters highlighting lesser-known PD symptoms, and book displays with content related to Parkinson's disease!



TRANSIT ADVERTISEMENTS

Transit advertisements were displayed in key regions across British Columbia to help amplify our message. In Vancouver, our campaign appeared on SkyTrain interiors, station posters at King George and Joyce-Collingwood, and a wall mural at Waterfront Station. Interior bus ads also ran throughout the city. Similar bus advertisements were placed in Victoria and Kelowna.





Register Now for SuperWalk 2025!

Lace up your runners, gather your teams, and join us for Parkinson Society British Columbia's largest fundraising event of the year, Parkinson SuperWalk!

GREAT PROGRESS BEGINS WITH ONE STEP

Join us for Parkinson Society British Columbia's largest fundraising event of the year—Parkinson SuperWalk! Kicking off the weekend of September 6 & 7, incredible individuals from over 20 communities across the province will unite in this inspiring walk to bring hope to the approximately 17,500 people in BC living with Parkinson's disease. Together, we can make a difference!

Funds raised from this event help Parkinson Society BC continue to grow its programs and services, expand advocacy efforts and invest in innovative research.

REGISTER

Beginning the weekend of September 6 & 7, incredible British Columbians in more than 20 communities throughout the province will walk together to help give hope to approximately 17,500 people in BC living with Parkinson's disease.

Register today at:

parkinson.bc.ca/superwalk



1021 West Hastings Street, 9th floor,
Vancouver, BC V6E 0C3



RETURN POSTAGE GUARANTEED
PORT DE RETOUR GARANTI