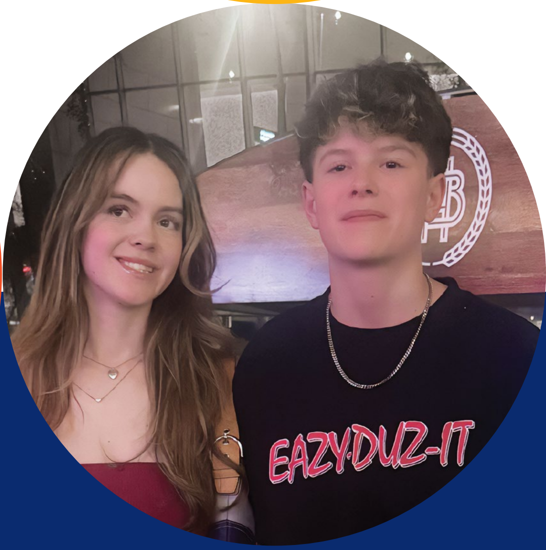
InVision

Spring 2026

FightingBlindness.ca



Inside:

Women Advancing Vision Health Research.

Raising Our Sights: Vision 2030.

Meet the Move for Sight Ambassadors.

FIGHTING
BLINDNESS
CANADA

A MESSAGE FROM

Dr. Larissa Moniz.

Dear friends,

Every breakthrough begins with a question — and every question begins with people who refuse to accept vision loss as inevitable. This edition of InVision celebrates the researchers, clinicians, families, and supporters who are expanding what is possible for Canadians affected by blindness and eye disease.

On page three, we explore **stem cell therapy**, one of the most innovative frontiers in vision research. Drawing on insights from Dr. David Gamm, University of Wisconsin, the primer translates complex science into clear, accessible language. He explains what stem cells are, how they may repair damaged retinas, and what challenges remain before these therapies reach patients. Understanding the “how” will help you follow discoveries with confidence and optimism.

This issue also highlights **Women in Research**, profiling five FBC-funded researchers shaping the next generation of treatments. From decoding the genetics of vision loss to protecting neurons to strengthening research infrastructure, these vision research champions are driving meaningful progress at every level.

At the heart of our mission are people like siblings Ava and Chase. They both have Stargardt disease, and as this year’s **MOVE FOR SIGHT** Ambassadors, are determined to prove that — with some adaptation — they can continue to do what they love.

We also share an update on our strategic plan, **Raising Our Sights: Vision 2030**, including progress toward expanding education and engagement.

Together, these stories reflect a single purpose: accelerating sight-saving research and strengthening the community we serve. Thank you for being part of this movement and turning knowledge into hope and hope into action.

With gratitude,

Larissa Moniz

Larissa Moniz, PhD
Director, Mission & Programs
Fighting Blindness Canada

Charitable Registration Number:
119129369 RR0001.

CELL REPLACEMENT THERAPY: A PRIMER.

As the first stem cell therapies have gone into clinical trial to test if they are safe and effective, we have put together a primer to help our readers understand them, and we turned to Dr. David Gamm, a pioneer in stem cell therapy for blinding eye disease for help.

Whether or not stem cell therapy — also known as cell replacement therapy — is right for you, depends on how far your eye disease has progressed.

In the early stages of an inherited eye disease, like retinitis pigmentosa, where people haven't lost many of their retinal cells, a therapy that slows progression, such as gene therapy, is the likely treatment protocol. As a disease progresses, and retinal cells are lost, other types of restorative treatments, like cell replacement therapies or optogenetics, are needed.

At the heart of cell replacement therapies are pluripotent stem cells. These are special cells that are capable of producing all the cells that we have in our own body. Pluripotent stem cells are rare but in the mid-2000s, a scientist discovered a way to reprogram adult skin or blood cells back into an embryonic or pluripotent stem cell state.

Dr. Gamm and his team have worked — successfully — on ways to turn these stem cells into a type of retinal cell called photoreceptor cells, which sense light and are lost in inherited retinal disease. But creating new photoreceptor cells in a lab and demonstrating if they can help replace lost photoreceptors is a long process.

After growing the cells, Dr. Gamm's team needed to show that these new photoreceptors could do what photoreceptors do: they needed to detect light, produce energy and connect to other cells in the retina.

They were able to demonstrate that the photoreceptors could detect light. Moreover, they were also able to show that these cells could regrow the wires they needed to connect to other cells in the retina.

The next step in the development of stem cell therapies is to be able to scale up the manufacturing of the pluripotent cells and derived photoreceptors without losing any of the functionality, and to test them through clinical trials. The photoreceptors are injected into the subretinal space, and this needs to be done in a safe way without damaging the eye.

Over the course of five-to-six years, with funding from Fighting Blindness Canada, Dr. Gamm's team has proved this and much more leading to a milestone clinical trial.

Currently, Dr. Gamm and his team are working with BlueRock Therapeutics LP for a first-of-its-kind cell replacement therapy clinical trial. It's an exciting trial with the prospect of one day helping people to regain some of their lost vision.

To learn more about cell replacement therapy, watch Dr. Gamm's talk at:
FightingBlindness.ca/stem-cell-primer

WOMEN ADVANCING VISION HEALTH RESEARCH.

Leading Discovery, Driving Change.

March 8 was International Women's Day and we wanted to take the opportunity to highlight some woman in vision health research who are shaping the future of how eye disease is understood, treated and prevented. Although women now make up a growing share of the scientific workforce, they remain under-represented in senior research leadership and funding.

Breakthroughs in vision health depend on talented scientists from every background. Increasingly, women researchers are leading some of the most promising advances — they are asking bold questions, challenging long-held assumptions, and translating discovery into real-world progress.

Each year, the global research community recognizes the importance of supporting and celebrating women in science — a reminder that diverse leadership strengthens discovery and accelerates impact.

We've highlighted just a few of the women who are making an impact in vision research.

Dr. Brittany Carr
University of Alberta

Understanding why vision deteriorates at the cellular level is essential to developing effective therapies. Dr. Brittany Carr's research focuses on PROM1, a gene critical to the health and function of photoreceptors. Mutations in PROM1 are linked to inherited retinal diseases that progressively erode sight.

By investigating how PROM1 functions in the eye — and what goes wrong when it doesn't — Dr. Carr is helping to unravel the biological mechanisms that underlie vision loss. Her work provides foundational insight that could inform future gene-based or regenerative therapies, offering hope to families affected by inherited eye disease.

Dr. Mélanie Hébert
Université Laval

Clinical trials are where research meets reality. Dr. Mélanie Hébert is leading a clinical trial to test strategies for retinal detachment, a medical emergency that can result in severe vision loss if not treated effectively.

By rigorously evaluating surgical and clinical approaches, Dr. Hébert's work aims to improve patient outcomes and inform best practices in ophthalmic care — ensuring that research translates directly into better vision preservation for patients.

Dr. Lia Huo
University of Toronto

Dr. Lia Huo is advancing a gene-agnostic neuroprotection strategy for retinitis pigmentosa, a condition caused by many different genetic mutations.

Using human retinal organoids and a slow-release hydrogel delivery system, her research investigates the protective mechanisms of a vision-preserving protein called RdCVF. This approach holds promise for therapies that could benefit a broad range of patients — regardless of their specific genetic mutation.

Dr. Anne Xuan-Lan Nguyen
University of Montreal
University of Toronto &
University of Oxford

Dr. Anne Xuan-Lan Nguyen's research explores immune mechanisms in thyroid eye disease, with a focus on preventing dysthyroid optic neuropathy — a severe complication that can lead to permanent blindness. By identifying how immune pathways contribute to optic nerve damage, her work aims to inform earlier intervention strategies and preserve sight before irreversible injury occurs.

Dr. Johane Robitaille
IWK Health Centre

Progress in vision health research depends not only on discovery, but on collaboration. Dr. Johane Robitaille leads the Nova Scotia site of the Fighting Blindness Canada Inherited Retinal Disease Patient Registry, helping to ensure that high-quality data informs research, clinical care, and future trials.

A past reviewer for FBC, Dr. Robitaille brings a critical, community-minded perspective to the research ecosystem. Her work strengthens the infrastructure that allows science to move faster.

Looking Ahead.

From decoding the genetics of vision loss to protecting neurons, strengthening research infrastructure, and improving clinical care, women in vision health research are driving meaningful progress at every level. Their leadership is expanding what's possible — scientifically, clinically, and collaboratively.

As the vision research community continues to grow and evolve, these women exemplify the innovation, rigor, and compassion needed to move closer to a future without vision loss. Their work reminds us that when diverse voices lead discovery, the benefits extend far beyond the lab — reaching patients, families, and communities everywhere.

AVA AND CHASE

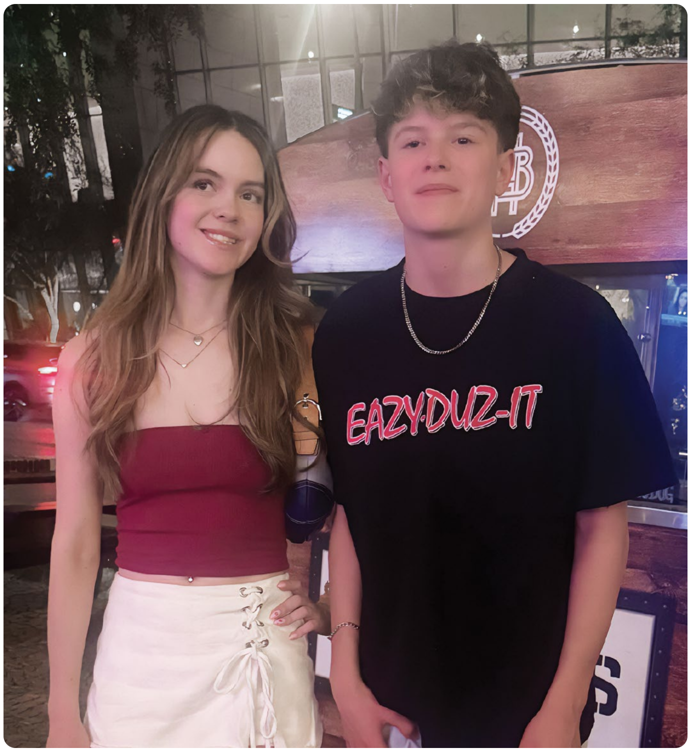
Raising Awareness and Hope.

Meet the 2026 MOVE FOR SIGHT Ambassadors.

Ava learned early that vision loss doesn't arrive with a single moment — it unfolds quietly. For her, it looked like a blind spot in the centre of her world, ringed by blur and static, like a TV between channels. She doesn't remember receiving her Stargardt diagnosis as a child. She does remember being pulled from class to learn Braille. And she remembers adapting.

Now 20, Ava plans everything with intention. She attends college, dances, sews, paints, goes out with friends, and cheers loudly at her brother Chase's hockey games while her mom narrates the action. Her proudest achievement isn't academic or athletic — it's building her confidence. "The accomplishment I am most proud of is becoming confident in my blindness."

Her younger brother Chase, 14, has watched this journey from the beginning. He's navigating his own Stargardt diagnosis, adjusting to Braille, screen readers, and a world where eye contact isn't always possible. Like his sister, he's adapted so he can pursue what he loves, like hockey, which he plays at a high level. His advice for others who are navigating vision loss: "Don't let it stop you from doing what you love."



That's why both Ava and Chase are this year's **MOVE FOR SIGHT** Ambassadors. Their family has had a long history of supporting fundraising events for Fighting Blindness Canada in the hopes of finding treatments and cures.

They also hope to raise awareness of what it means to be blind. Ava says people often underestimate what she's capable of because of her vision loss. "I wanted to share my story and show everyone that living with vision loss doesn't have to limit you," she says. "We can still do all the things as sighted people, but just need modifications."

Chase sums it up simply: "Vision loss doesn't make you any different."

MOVE FOR SIGHT
takes place on Sunday, June 6.
Register today at: MOVEFORSIGHT.ca

STRATEGIC PLAN UPDATE.

Many people know Fighting Blindness Canada for our investment in vision research, funding leading researchers and advancing discoveries that bring new treatments and cures closer to reality. But our work goes beyond the lab. Through our **community education programs**, we translate complex science into clear, trusted information and create opportunities for people to **connect with, learn from, and support one another** — helping individuals and families living with vision loss feel informed, understood, and hopeful.

Vision loss touches every part of life — work, school, relationships, and well-being. That's why we've invested over $5 million in research-driven education and community initiatives that translate scientific discovery into practical knowledge, strengthen understanding, and support better outcomes for those with vision loss.

This commitment is central to our strategic plan, **Raising Our Sights: 2030**, which celebrates our achievements while setting the stage for a future where FBC continues to be a leader in vision research and education. We focus on areas where we can have the biggest impact and reach more people.

Learn more at:
FightingBlindness.ca/viewpoint

Coffee Connections

View Point Coffee Connections brings this vision to life. Launched in 2025 as part of our expanded View Point Education Program, these small, in-person gatherings create welcoming spaces where people with vision loss can meet others with shared experiences, ask questions, and learn from experts. In 2025, Coffee Connections took place in Vancouver, Edmonton, Ottawa, and North York. Participants shared how meaningful it was to connect face-to-face with others who truly understand vision loss, as well as to hear from experts on the latest research and treatment approaches.

Webinars

In 2025, we also introduced more disease-specific webinars, including sessions on Stargardt disease; X-linked conditions such as XLRS, XLRP, and choroideremia; syndromic conditions like Usher and Bardet-Biedl syndromes; and dry and wet AMD. Led by experts and grounded in current research, these sessions helped participants better understand their diagnosis, learn about emerging treatments, and feel more confident about the future.

We hope you'll join us this year at webinars about age-related macular degeneration, inherited retinal disease, glaucoma and innovative treatments, or at one of our 16+ in-person events.

Together, these programs show how Fighting Blindness Canada brings science and community together — strengthening connections, advancing research, and creating hope for people living with vision loss.

UPCOMING EVENTS

View Point Educational Series.

FightingBlindness.ca/viewpoint

Live Webinars

Join us via Zoom for webinars featuring research updates, expert Q&As, and community connection sessions.

Glaucoma and Optic Nerve: In Conversation
Friday, March 13, 11 a.m. – 1 p.m. ET

Inherited Retinal Disease (IRD): In Conversation
Wednesday, May 20, 7 p.m. – 9 p.m. ET

Coffee Connections

These in-person sessions are an opportunity for people living with age-related macular degeneration and inherited retinal disease to learn and connect.

Victoria, AMD and IRD: Tuesday, April 7

Vancouver, AMD and IRD: Thursday, April 9

Edmonton, AMD and IRD: Saturday, April 11

Calgary, IRD: Sunday, April 12

Calgary, AMD: Monday, April 13

Our Health Information Line is Here to Help.

Getting diagnosed with an eye condition and navigating tests, appointments, and treatments can be confusing. Our Health Information Line is here to help.

Contact our Health Information Line:
Email: healthinfo@fightingblindness.ca
Call: 1-888-626-2995

Bring the Future into Focus with Monthly Giving.

Monthly donors make progress possible through steady, reliable generosity. When you give each month, you help accelerate breakthroughs in treatment.

Contact Jennifer Meriano to learn more:
Email: jmeriano@fightingblindness.ca
Call: 1-800-461-3331 x 262