InVision

FIGHTING BLINDNESS CANADA






SPRING 2025 HIGHLIGHTS

Raising our Sights: Vision 2030—our new five-year strategy

Meet the winners of our research competitions

Mara Pagliaro: Finding Hope in Community and Action

Charitable Registration Number: 119129369 RR0001

A MESSAGE FROM DR. LARISSA MONIZ

Dear friends,

I am thrilled to introduce this issue of InVision, where we celebrate our collective progress and share exciting news about our journey ahead.

In this edition, we unveil our ambitious new strategic plan, **Raising Our Sights: Vision 2030**. Building on the strong foundation you have helped create, this plan charts a course to elevate Fighting Blindness Canada (FBC) as a champion of vision research and a thought leader across multiple eye diseases.

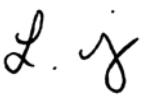
In 2024, FBC awarded six researchers a total of $2.4 million though the **Research Grant Competition** and the **Clinician Scientist Emerging Leader** awards. These awards give the best and brightest early career Canadian vision scientists crucial seed funding to move research projects forward and launch new areas of study. To learn how they are pushing the boundaries for research about inherited retinal diseases, age-related macular degeneration and glaucoma, turn to pages 4 & 5.

On the community front, our second annual **MOVE FOR SIGHT** event has kicked off, and on page 7 you will hear firsthand from this year's **MOVE FOR SIGHT** ambassador **Mara Pagliaro** about why the event is so important to her, and how it has given her hope and purpose. We hope you will feel inspired by her energy, see the power of community in driving change and be motivated to join by registering your team!

As always, our progress is only possible with your steadfast support. Thank you for standing with us as we continue to push the boundaries of what is possible in vision health.

Enjoy the read and don't hesitate to reach out with questions, comments or suggestions.

With gratitude and hope,



Larissa Moniz, PhD
Director, Research and Mission Programs
Fighting Blindness Canada

RAISING OUR SIGHTS: VISION 2030

Since 1974, FBC has been driven by a singular mission: offering hope and help to the vision loss community through groundbreaking research, impactful programs, and unwavering support. Thanks to you, we've built a strong legacy—but our work is far from over.

With our new five-year strategic plan, Raising Our Sights: Vision 2030, we are setting an ambitious course to further establish FBC as a champion of vision research and thought leader across multiple eye diseases.

This plan isn't just about growth, it's about achieving the results that matter most to you. It honours the progress we've made together while laying the foundation for a future where FBC remains a beacon of hope in the fight against vision loss.

To read the full report go to FightingBlindness.ca/strategic-plan.

To achieve these goals, we will focus on three themes:

1. Expanding Community Connections

We will deepen our support in the inherited retinal disease (IRD) and age-related macular degeneration (AMD) communities while trying to grow support for other blinding eye diseases, like glaucoma and diabetic retinopathy, with a focus on areas in which we can have the biggest impact.

2. Enhancing Fundraising and Brand Positioning

We will refine our brand strategy to increase engagement so more people are aware of the support we can offer, build stronger connections and inspire action towards our shared vision. We will broaden our community of support and generate new opportunities for increased investment in key priorities.

3. Scaling for Greater Impact

We will build the necessary resources, systems, and culture to scale our success, allowing us to serve a wider audience while maintaining our reputation for research excellence and community support.

Join Us in Raising Our Sights

None of this is possible without you. Achieving these goals will require the collective dedication of our employees, board, volunteers, partners, and—most importantly—to you, our community. Together, we will shape a future where FBC leads with innovation, compassion, and an unwavering commitment to ending vision loss.

CELEBRATING THE NEXT GENERATION OF VISION RESEARCHERS

For 50 years, Fighting Blindness Canada (FBC) has been championing vision research, funding groundbreaking studies, and helping to grow Canada's research community. Many of our past grant winners have gone on to become world-renowned leaders in fields like inherited retinal disease, gene therapy, and stem cell research.

In 2024, we made it a priority to support rising stars in vision science—brilliant early-career researchers whose work will shape the future of eye health. We're thrilled to introduce this year's four grant recipients, who are making incredible strides in understanding and treating inherited retinal diseases, age-related macular degeneration, and glaucoma.

MEET THE RESEARCH GRANT WINNERS

Dr. Matthew Benson, University of Alberta
The Role of Peroxisomes in Retinal Health

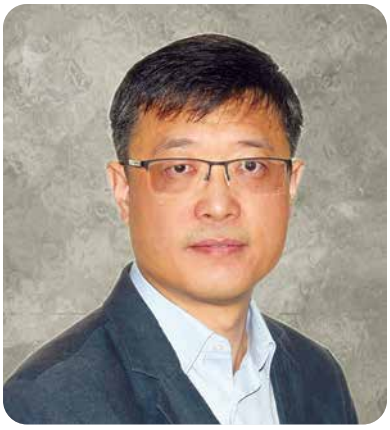
Award: $184,105

Dr. Benson is studying peroxisomes—tiny structures in cells that help break down fats and clear harmful substances. When these structures don't function properly, they may contribute to retinal degeneration. His research could lead to new treatments for inherited retinal diseases and age-related macular degeneration.

Dr. Brittany Carr, University of Alberta
Understanding PROM1 and Its Role in Inherited Blindness

Award: $200,000

Dr. Carr is investigating how mutations in the PROM1 gene lead to inherited retinal diseases like cone-rod dystrophy, and Stargardt-like macular degeneration. Her work aims to uncover how this gene functions and how we might develop new treatments.



Dr. Baohua Liu, University of Toronto, Mississauga
Testing Gene Therapy for Night Blindness

Award: $200,000

People with congenital stationary night blindness type 2A (CSNB2A) struggle to see in low light. Dr. Liu is testing whether gene therapy can restore vision in mice with this condition—even a long time after vision loss has occurred. If successful, this research could lead to new treatments and reveal how the brain adapts to vision loss and restoration. This information is crucial for development of new treatments for many types retinal degeneration.

Dr. Pierre Mattar, Ottawa Hospital Research Institute
Investigating Immune Cells in Glaucoma

Award: $200,000

Inflammation plays a big role in many retinal diseases, including glaucoma. Dr. Mattar has discovered a new type of immune cell in the retina—double negative T cells (DNTs). His research will explore how these cells contribute to glaucoma progression.

SUPPORTING CLINICIAN-SCIENTISTS IN VISION RESEARCH

FBC is also proud to support eye doctors who are blending clinical practice with research. This year, we awarded two Clinician Scientist Emerging Leader (CSEL) awards to promising ophthalmologists and optometrists.

Dr. Sheetal Pundir

Studying how vision loss progresses in Zellweger Spectrum Disorder, a rare condition linked to peroxisome dysfunction. Dr. Pundir has a PhD and is currently an ophthalmology resident at McGill University Health Centre.

Dr. Sharon Qiu

Designing the next generation of scleral lenses to improve treatment for corneal diseases. Dr. Qiu, our first optometry CSEL awardee, is a trained optometrist and is completing her PhD in research at the University of Waterloo.

A huge congratulations to all our grant recipients! Your dedication and innovation are driving vision research forward. And to our incredible donors—your support makes this all possible. Together, we're investing in a more hopeful future for all with vision loss.

FDA APPROVES STEM CELL THERAPY CLINICAL TRIAL

FBC Funding Paves the Way

Major medical breakthroughs take time. Years of research build on one another, leading to innovations like the upcoming clinical trial for a groundbreaking stem cell therapy. Dr. David Gamm of the University of Wisconsin played a key role in advancing this therapy, called OpCT-001, with support from a Restore Vision 20/20 grant from FBC.

BlueRock Therapeutics LP recently announced that the U.S. Food and Drug Administration (FDA) has approved a clinical trial for OpCT-001, a stem cell therapy targeting retinal diseases where photoreceptors are damaged and lost. Photoreceptor cells in the retina convert light into signals sent to the brain. Their degeneration leads to vision loss in diseases like retinitis pigmentosa, Usher syndrome, and age-related macular degeneration.

With FBC funding, Dr. Gamm optimized the development and delivery of photoreceptor cells grown from stem cells. His team demonstrated that these new photoreceptor cells can integrate and function within the retina.

Stem Cells: A Game-Changer?

While gene therapy can slow vision loss by preventing photoreceptor cell death, it cannot restore lost vision. Stem cell therapy, however, aims to replace damaged or dead photoreceptor cells with lab-grown ones.

In 2022, Dr. Gamm's team demonstrated that lab-grown photoreceptors respond to light and extend axons toward other retinal cells. By 2023, they confirmed these cells were making new connections.

On Sept. 3, 2024, BlueRock Therapeutics—a subsidiary of Bayer AG—moved forward with clinical trials following FDA approval for OpCT-001, built on Dr. Gamm's research. This marks the first-ever clinical trial of its kind.

This approval brings new hope to those with vision loss, marking a crucial step toward potential sight restoration.

"This is a major accomplishment for our collaborative team of academic and industry scientists and clinicians. It is also the culmination of nearly a decade of concerted effort to develop an iPSC-derived photoreceptor replacement therapeutic. Importantly, multiple aspects of this work (and next-generation products) have been inspired or advanced via support from Fighting Blindness Canada."

— Dr. David Gamm, University of Wisconsin

MARA PAGLIARO: FINDING HOPE IN COMMUNITY AND ACTION

Though Mara Pagliaro has a rare disease, she knows she doesn't stand alone—and that's what gives her hope.

In February 2024, what was to be a routine eye exam changed her life. She learned—after many tests and appointments—that she has Stargardt's disease, a blinding eye disease that affects central vision. Before her diagnosis, Mara thought vision was a binary—either you were completely in the dark, or you had perfect sight.

"The majority of people who experience vision loss have some level of vision, which I never knew before," she says. Because her central vision is affected, it makes reading, recognizing faces and performing daily tasks challenging.

But despite these challenges, Mara remains hopeful because organizations like FBC are dedicated to funding vision research. Research that is leading to innovations like gene or stem cell therapy and new drug treatments give Mara hope.

"While there isn't a cure yet, these advancements give me hope that future generations may have treatment options," she says.

Mara and her family want to do their part to ensure treatments and cures are found, which is why she joined FBC's **MOVE FOR SIGHT** fundraising event.

On Sunday, June 22, Mara will be joined by her family and friends, as well as the wider vision loss community to raise awareness and funds for vision research and educational programs. Mara will join an in-person event in Toronto, but Canadians will also be able to MOVE from wherever they are, and in any way they want—walking, running, cycling and more.

Mara is this year's **MOVE FOR SIGHT** ambassador. "I want to raise awareness. I want to share my story, educate others, and encourage people to support vision research. I would also like to stress to everyone the importance of getting regular eye exams," she says. "Without going for a regular eye exam, I would have never known about my inherited eye disease and how to manage it to slow its progression."

Throughout her diagnosis process, Mara relied on the resources and informative events hosted by FBC. "Their mission aligns with my journey—not just in seeking a cure but also in providing education and community support." Connecting with FBC enabled her to get involved with the vision loss community and learn from others.

"Knowing that FBC is actively working to improve the future for people with inherited retinal diseases makes me feel like I'm part of something bigger."

Join Mara on Sunday, June 22
MOVEFORSIGHT.ca

JOIN US FOR FBC EVENTS: VANCOUVER, CALGARY AND EDMONTON

VIEW POINT CALGARY

Saturday, May 24

- Registration and Community Resource Fair: 1–2 p.m. MT
- View Point Sessions: 2–5 p.m. MT
- Social Hour: 5–6 p.m. MT
- **Location:** Carriage House Hotel 9030 Macleod Trail, Calgary, AB T2H 0M4

This event will include an exhibitor fair and a community building social hour! For full program details and to watch recordings of past VIEW POINT events, visit, **fightingblindness.ca/viewpoint**

REGISTER NOW

Our Health Information Line is Here to Help.

Do you have an eye health related question? Contact our Health Information line at **healthinfo@fightingblindness.ca** or call **1.888.626.2995**

Bring a Bright Future into Focus with Monthly Giving.

Bring a Bright Future into Focus with Monthly Giving. Help change the lives of people living with vision loss by joining our monthly giving program. For information, **contact Josie Koumandaros 1.800.461.3331 x 262 jkoumandaros@fightingblindness.ca**

AMD COFFEE CONNECTIONS

These unique gatherings blend peer support and Ask the Expert sessions, providing individuals living with age-related macular degeneration (AMD) with an opportunity to connect with others, share experiences, and gain insights from experts. Register at **fightingblindness.ca/viewpoint**

Vancouver Coffee Connections

Thursday, April 24

- **Time:** 10 a.m.–12 p.m. PT
- **Location:** Library Square Conference Centre, 350 W Georgia St, Vancouver, BC V6B 6B1

REGISTER NOW

Edmonton Coffee Connections

Thursday, May 22

- **Time:** 10 a.m.–12 p.m. MT
- **Location:** Mill Woods Senior and Multicultural Centre, 2610 Hewes Way NW, Edmonton, AB T6L 6W6

REGISTER NOW