

## Cost of Vision Loss in Canada Report

PAGES 4-5



## Investing in Vision Research

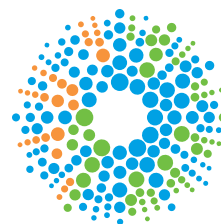
PAGE 3

Q&A With  
Dr. Sarah  
McFarlane

PAGE 6

FBC Member Donates  
\$100,000 Towards  
Vision Research

PAGE 7



**FIGHTING  
BLINDNESS  
CANADA**

Charitable Registration Number: 119129369 RR0001

# LETTER FROM DR. MICHEL CAYOUCETTE

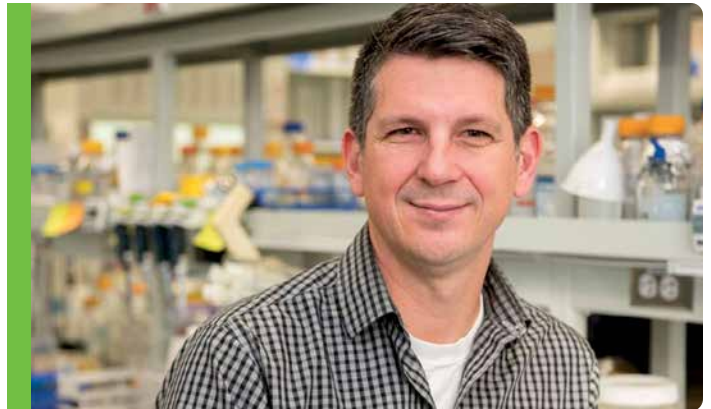
This is an exciting time for vision research thanks to your support. Together, we have kept vision research moving forward despite the challenges presented by COVID-19.

As the Scientific Advisory Board Chair at Fighting Blindness Canada (FBC), I've witnessed how quickly sight-saving research and treatments are accelerating. The pace of discovery is mind-blowing – thanks to you and so many other generous supporters who have helped move research forward, from discovery research to clinical trials and effective treatments. For example, this past October, Health Canada approved Luxturna, the first sight-restoring gene therapy treatment for an inherited retinal disease.

And, there are many other exciting developments happening in vision research right now, that could lead to revolutionary cell replacement and reprogramming therapies that offer the potential to replace damaged photoreceptor cells or stimulate retina cells to regenerate cells lost in disease.

FBC has also launched its 2021 Research Grant Competition (read more about this exciting competition on the next page), and will be announcing its Clinician-Scientist Emerging Leader Awards this summer. You are helping make all this ground-breaking research and more possible!

I want to assure you, while researchers continue to feel the impact of COVID-19, we won't let it slow down our progress. In 2021, we want to continue to expand research so we can achieve our mission to advance treatments and cures for blinding eye diseases.



In this edition of FBC's InVision, you'll learn more about some of the great advancements FBC-funded researchers are making, data from a newly released Cost of Vision Loss in Canada Report, and how generous donors like Malcolm Hunter are helping empower the field of vision science.

Thank you for making a tremendous impact by transforming the lives of so many Canadians living with vision loss. Today, with your support, we are funding research that is helping us understand why vision loss occurs, leading to the development of innovative treatments and providing infrastructure to bring clinical trials to Canada. Together we are providing hope for a future without blindness.

With my deepest gratitude,

A handwritten signature in blue ink, which appears to read "Michel Cayouette". The signature is fluid and cursive.

**Dr. Michel Cayouette**  
**Montreal Clinical Research Institute**  
**Scientific Advisory Board Chair**  
**Fighting Blindness Canada**

# INVESTING IN VISION RESEARCH

## 2021 RESEARCH GRANT COMPETITION

Over the past 47 years, FBC donors have invested over \$40 million in research grants to over 70 Canadian scientists supporting innovative vision research and education at hospitals and universities across Canada. Our grants fund prestigious Canadian researchers and support scientists in the early stages of their careers.

In 1974, there were very few scientists studying eye disease in Canada, but now our research grant reviewers must choose between dozens of high-quality proposals and every year there are meritorious applications that we cannot afford to fund.

**Here is some of what FBC's funded scientists have to say:**

**75%** said funding from **FBC helped them develop a research** project that otherwise would not have been funded.

**89%** said funding from **FBC helped them successfully apply to Canada's large government funding agencies** – like the Canadian Institutes of Health Research (CIHR) – to support the next steps of their research.

FBC's funding has been instrumental in growing and nurturing vision science in Canada – much of this success is due to our robust review process. In order to fund the best and most promising vision science, we assemble a group of reviewers who are internationally recognized as experts in their field. Through in-depth review and discussion, this expert group helps FBC identify the applications that will drive vision research forward and are most likely to lead to the development of new treatments for blinding eye diseases. We are so thankful for our reviewers who volunteer their time to ensure that FBC is funding the highest caliber of research.

**We are excited to announce the launch of our 2021 Research Grant Competition!**

The competition encourages applications from all areas of vision research and will provide awards of up to \$200,000. The competition's full application deadline is July 22, 2021. We can't wait to see the bold new ideas that are put forward and share results with you in the coming months. To learn more visit, [fightingblindness.ca](http://fightingblindness.ca).



# NEW REPORT: COST OF VISION LOSS AND BLINDNESS IN CANADA



In partnership with the Canadian Council of the Blind, Canadian Association of Optometrists, and the Canadian Ophthalmological Society, Fighting Blindness Canada commissioned new research to identify Canada's crisis of preventable blindness.

## Why We Commissioned this Report

Vision loss has wide-ranging implications for the individuals, communities, and societies that are impacted by it. To plan effectively for the provision of services for people with vision loss and to fully understand its economic impacts, it is essential that we have current, accurate estimates on the cost of vision loss in Canada. This report, updates statistics from a 2009 report, to provide a current estimate of the impact and cost of vision loss in Canada.

*Deloitte Access Economics was commissioned to conduct an updated assessment on the prevalence and cost of vision loss in Canada using data from 2019.*

## Your Support

We're calling for a national vision health plan that focuses on free regular eye exams and access to current and future treatments to prevent blindness and restore sight. The government must invest in innovative vision research to turn this situation around.

### Read the Report at [StopVisionLoss.ca](http://StopVisionLoss.ca).

Join us in signing the petition, so your voice is heard about this important issue.

**This new report reveals that vision loss costs Canada almost \$33 billion annually.**

### 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](mailto:jkoumandaros@fightingblindness.ca)

# REPORT FINDINGS

The costs of vision loss are shocking:

## 3/4 CASES COULD BE PREVENTED IF CAUGHT EARLY AND TREATED



Simply put, regular eye exams and treatment prevent blindness. It's crucial that Canadians have access to regular publicly funded eye exams; when diagnosed early, many conditions can be treated to prevent vision loss.

### 1.2 MILLION

Canadians are living with vision loss



### 8 MILLION

Canadians are living with an eye disease that puts them at risk for blindness



### 4 LEADING CAUSES

of blindness:

- Age-related macular degeneration
- Diabetic retinopathy
- Glaucoma
- Cataracts

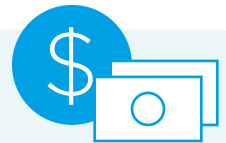


Learn more at:  
[StopVisionLoss.ca](http://StopVisionLoss.ca)

### \$32.9 BILLION

The total cost of vision loss in Canada per year. This includes;

- Direct health system costs: \$9.5 billion
- Loss of productivity and other: \$6 billion
- Loss of wellbeing: \$17.4 billion



### \$10,666

Estimated annual financial and economic cost of vision loss per person per year



### What Will Your Legacy Be?

Consider leaving a gift to Fighting Blindness Canada in your Will to help future generations.

For information, contact Ann Morrison  
1.800.461.3331 x 232  
[amorrison@fightingblindness.ca](mailto:amorrison@fightingblindness.ca)

# Q&A WITH FBC-FUNDED RESEARCHER

## DR. SARAH MCFARLANE



Dr. Sarah McFarlane, University of Calgary, is studying how retinal pigment epithelial (RPE) cells move with the hope that it may be used to increase the success of cell replacement therapy for age-related macular degeneration (AMD). We caught up with Dr. McFarlane to learn more about this research...

### 1. Tell us about your research program.

For many years we have been interested in what controls cell movements during the development of the embryonic eye. For our studies we use an animal model called a zebrafish. The position or location of a cell in the developing eye is everything, because it determines what differentiation factors a cell encounters and what cells it can connect to and communicate with. So ultimately, location determines a cell's identity and role in the neural circuits that create vision. We can learn a lot about what molecules influence cell movement in the embryo and then apply this information to the injured or diseased retina in order to replace lost cells and neural connections.

### 2. What were the key discoveries from your FBC funded project?

With Fighting Blindness Canada's support, we looked at what controls the movements and position of the retinal pigment epithelium (RPE), a key tissue that provides critical support for the light sensing cells of the retina, the photoreceptors. AMD involves the degeneration of RPE cells which can then lead to damage and death of photoreceptors. Cell replacement therapies for AMD are considering transplanting in healthy RPE to replace damaged RPE cells. To be successful, these transplanted RPE cells will have to migrate to the sites of RPE damage.

This project has led us to publish two studies where we identified how RPE cells move during normal zebrafish embryonic eye development, and a key molecule that promotes and directs these movements, information we hope can be used to ensure the success of cell replacement therapy for AMD. We now will move to a RPE injury model to see if this same molecule controls RPE movements and behaviour after injury a situation that more closely resembles what happens in the eye when someone has AMD.

### 3. What has the impact of donor funding meant for your research?

This funding came at a key time in the laboratory and allowed me to continue to support talented and highly qualified personnel on this innovative project that moved my research in a new but risky direction. Funding not only supported my team's exciting vision research, but allowed us to leverage funds towards successfully obtaining longer term support from the Canadian Institutes of Health Research (CIHR).

### 4. What keeps you motivated outside the lab?

Being in Calgary so close to wonderful mountains, one realizes how important the sense of sight is to one's ability to appreciate and explore one's environment. I am fortunate to be able to hike in one of the most beautiful spots in the world. I know how lucky I am to be able to appreciate the gorgeous scenery and realize how important it is that we maintain and restore vision so that others can also get to appreciate their own place of beauty.

*Dr. McFarlane's study is supported by funding from the Arthur Child Foundation.*

# DONOR GIVES \$100,000 TOWARDS VISION RESEARCH



Current President and Owner of Fred Deeley Limited, and Past President of Deeley Harley-Davidson Canada, Malcolm Hunter helped bring hope this year for over 1.2 million Canadians living with vision loss.

The long-time Vancouver business leader has been a valued supporter of Fighting Blindness Canada (FBC) since 1995. Ann Morrison, FBC Director of Philanthropy shares,

“I first met Malcolm at one of FBC’s motorcycle fundraising events, the Forever Yonge Run. His company at the time, Deeley Harley-Davidson Canada was a sponsor of the event, the first of many times the company would sponsor this and other FBC events. He was so thoughtful and gracious, and very much involved in helping wherever possible. He was and continues to be a dear friend to so many impacted by vision loss.”

Over the last two decades, Malcolm, Deeley Harley-Davidson, and the Trev Deeley Foundation have provided more than \$900,000 in funding to support vision research. We are so grateful for the corporate sponsorship of Deeley Harley-Davidson to our Ride for Sight and Comic Vision events that Malcolm made possible. These two events have raised over \$36 million to fight blindness.

In 2000, Malcolm’s efforts to help find new treatments and cures progressed as he became an avid member of FBC’s Board of Directors, serving on the Executive Committee for 5 years.

“As a dedicated member of FBC’s community and Board, and our dear friend, Malcolm has always led with courage, conviction and joy. Through the years, he lifted us up, kept us on course and inspired us to do our best. His thoughtful contributions to FBC

and our mission have been remarkable. Malcolm is fantastic!” says Sharon Colle, Past President and CEO of Fighting Blindness Canada.

In addition to supporting FBC’s mission to advance sight-saving research, Malcolm’s warm spirit and compassion has also extended towards helping the FBC staff team –helping host donor events at his motorcycle museum in Vancouver, guest speaking at ceremonies, and being an integral member of the strategic planning team. “He is an incredible person...” says Ann “his kindness has made significant impacts on the entire FBC community.”

On December 23rd, 2020 FBC received a surprise \$100,000 gift from Malcolm. When asked the reason for the gift, Malcom expressed his concern for FBC during times of the COVID-19 pandemic. With his donation and the support of others, Malcolm hopes the funds will help FBC push through the challenges the pandemic has posed. Malcolm explains,

“There’s a lot of work that goes behind all the work FBC does. I want FBC to be able to continue this work. I am amazed and proud of the progress FBC is making. Today, research that is being funded is getting results –that’s everything.”

From the entire FBC team and the vision loss community, we would like to thank Malcolm Hunter for his significant gift, contributions, and timeless support.

**FBC is looking to fill West Coast representation on our board, if you or someone you know may be interested, please email [info@fightingblindness.ca](mailto:info@fightingblindness.ca)**

# CYCLE FOR SIGHT VIRTUAL

## TOGETHER, LET'S MOVE!

Register at:  
[cycleforsight.ca](https://cycleforsight.ca)

**SATURDAY, JUNE 19, 2021**

**MOVE** with us and raise funds for sight-saving research by joining Cycle for Sight Virtual on June 19<sup>th</sup>.

Hop on a bike, grab your yoga mat, unwind the skipping rope, or choose your favourite physical activity.



## MORE EVENTS

### View Point Education Series

View Point features vision health experts from across Canada. Join us online to explore new cutting-edge research, treatments, and more! Register for an upcoming webinar at [fightingblindness.ca/events](https://fightingblindness.ca/events).

### Young Leaders Program

This program is a career-oriented initiative that provides young adults who are blind or partially sighted with tools to develop skills and pursue rewarding careers. Coming up in the program is a free webinar and fall summit. [fightingblindness.ca/events](https://fightingblindness.ca/events).

### Ride for Sight

The great Canadian tradition of motorcyclists fighting blindness continues. Join the online fundraising excitement, or Fenelon Falls, ON ride August 13-15, 2021! To learn more, visit [rideforsight.com](https://rideforsight.com).

## HEALTH INFORMATION LINE

Looking for someone to connect with on vision health questions? Contact our Health Information Line at

**1.888.626.2995**

[healthinfo@fightingblindness.ca](mailto:healthinfo@fightingblindness.ca)

### Download the AMI-tv App

Watch all of AMI's original programming, and digital exclusives, on demand by downloading the free, fully accessible AMI-tv App.

**Visit the Apple App Store today!**

**If you need assistance registering for any of our virtual events, please call us at 1.800.461.3331**