



We Support New Ideas

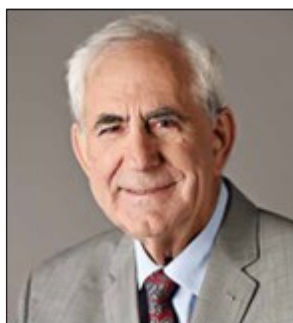
Glaucoma Research Society of Canada **News & Information**

Spring 2026

Vol. 37 No. 1

Charitable Registration No 889178695RR001

Board Member Alfred Kwinter Awarded the Order of Canada



We are delighted to share the news that Alf has been awarded the Order of Canada, the country's highest civilian honour. It recognizes individuals for outstanding achievement, dedication to the community, and extraordinary service to the nation.

The notation accompanying the announcement of his Award reads: *"Alf is widely recognized as one of Canada's leading personal injury, property loss, and insurance law lawyers. Throughout his career, he has championed plaintiffs in landmark cases against insurance companies, helping people rebuild their lives after tragedies that have taken their health, homes, livelihoods, and loved ones."*

Alf arrived in Canada when he was 3 years old with his parents who were Holocaust survivors. He grew up in downtown Toronto, worked in his father's store in the Kensington market, graduated from Harbord and found his passion in law school. Alf cofounded his law firm Singer Kwinter over 50 years ago.

Eye Drop Adherence and Eye Pressure

Researchers studied more than 13,000 eyes to see whether people who miss their glaucoma drops are more likely to have higher eye pressure and faster visual field loss.

They report that in this study the median usage of drops was only 60% of the time.

Below that 60% median usage of the time, each further 10% decrease in drop usage was associated with higher eye pressures and faster rate of both visual field test loss and OCT retinal nerve fibre layer thickness.

They reported that people were more likely to have poor adherence with drops if they used drops in one eye rather than both eyes, used 2 different drops versus only 1 anti-glaucoma drop, and some other issues. [***Ophthalmology Glaucoma, March/April 2026***](#)

President's Message



Last year's *Annual Supporters' Meeting*, held virtually on October 22, was well attended! One of the highlights was

the 15th Annual Albert Waxer Lecture about *The Critical Role of Medication Compliance*, presented by Dr. Ellen Zhou. If you missed it, you can watch the lecture and the Q&A session on our website.

The Society continues to upgrade its website, to make it more user-friendly, with easier access to "Questions and Answers" and other information.

The Board of Directors meet regularly online to focus on the Society's mission: raising funds for glaucoma research grants. The Society received 25 applications for 2026 research grants – a high-water mark and is awarding \$402,149 to 19 research projects.

Thank you to all Society supporters for donating these funds in 2025. Please continue your donations so that we can award grants again next year. In this newsletter, you'll find details on how you can support the Society in a tax-efficient way.

Our *Walk for Research* on October 26, 2025, raised over \$58,000. Watch our website for more information about this year's *Walk* scheduled for Sunday October 25 and our virtual 2026 *Annual Supporters' Meeting* on Wednesday October 21.

When the audited financial statements for the year ending December 31, 2025, are ready, they'll be available on our website.

We're also continuing to offer free webinars. The next one in the *My Glaucoma Journey* series for newly diagnosed glaucoma patients will take place on Thursday, June 4 at 8 p.m. More details are included in this newsletter.

James Parks, President

Brain Changes in Glaucoma May Reflect Vision Loss

Researchers used MRI scans to study how glaucoma affects the part of the brain that processes sight. They found that the area corresponding to peripheral vision, was smaller in patients with glaucoma and closely matched standard eye-test measures such as visual field loss and retinal ganglion cell counts. These findings suggest that MRI imaging of the visual cortex may one day help assess or monitor glaucoma.

Journal of Glaucoma, October 2025

Negative Emotions Not Linked to Glaucoma

Researchers examined large genetic datasets to see whether common negative emotions such as anxiety, stress, or low mood might cause glaucoma. They found no evidence that these emotions cause glaucoma or share underlying genetic pathways with it. Depression showed a genetic connection, but still no sign of causing the disease. ***BMJ Open Ophthalmology, October 2025***

Donations from Society Supporters Funded More Than \$402,000 in Grants to 19 Research Projects in 2026

Primary Angle Closure Suspect to Primary Angle Closure Glaucoma Progression: Deciphering Proteomic Signatures and Underlying Molecular Mechanisms Through Comparative Analysis, Christopher Zajner, Michael Balas, David Mathew, Western University, University of Toronto

Correlating Normal Tension Glaucoma Stage with OCT, Visual Field and PERG Biomarkers, Irfan Nizarali Kherani, Rachel Kuah, Brian Ballios, Tom Wright, University of Toronto

Drug-Induced Angle Closure Glaucoma: An International Pharmacovigilance Study Across 180 Countries. Andrew Mihalache, Patrick Ji, Michael Balas, David Mathew, University of Toronto, Temerty Faculty of Medicine

Validation of Ophthalmologist Billing Data for Glaucoma Research: A Study Using Electronic Medical Records from Toronto's Kensington Health, Yaping Jin, David Yan, Jenny Ma, Michael Balas, University of Toronto

Defining the role of Pitx2 in periocular mesenchyme during anterior angle development and glaucoma pathogenesis, Aftab Taiyab, Judith West-Mays, McMaster University

Peak Intraocular Pressure and Diurnal Fluctuations in Patients Undergoing Phacoemulsification with Gonioscopy-Assisted Transluminal Trabeculotomy, Matt Schlenker, Irfan N. Kherani, Yusuf Ahmed, Taylor Lukasik, University of Toronto

The predictive value of optical coherence tomography angiography vessel density in the parapapillary, macular, and choroidal regions for visual field progression in glaucoma, Mayar Alkhawaja, David Mathew, Michael Balas, Patrick Ji, University of Toronto

Proteomic profiling of the trabecular meshwork at different stages of primary open-angle glaucoma, Ellen Zhou, Jeremy Sivak, David Mathew, Susan Mollan, University Health Network, University of Toronto

A Novel Intact-Globe Endoscopic Model for Real-Time Mechanistic Assessment of Transscleral Cyclophotocoagulation, Michael Balas, Jeremy Sivak, David Mathew, University of Toronto

continued on next page ...

Assessing Uveolymphatic Outflow in Glaucoma, Yeni Yucel, Neeru Gupta.
University of Toronto/St. Michael's Hospital/Unity Health Toronto

Population-Based Analysis of Geographic Access to Glaucoma Care and the Impact of Teleophthalmology Implementation in ON, Canada,
Patrick (Xiang) Ji, Andrew Mihalache, David Mathew, Michael Balas. University
of Toronto, Temerty Faculty of Medicine

Role of AP-2beta Transcription Factor in Maintenance of the Trabecular Meshwork and Intraocular Pressure, Judith West-Mays. McMaster University

Assessment of Attention During Visual Field-Testing Using EEG, Delaney Henderson, Brennan Eadie, Aaron Newman, Dalhousie University

Polygenic Risk Score as an Outcome Predictor of Glaucoma Surgery,
Ike Ahmed, Gabriel Ayuk, University of Toronto

Vascular Dysregulation in Glaucoma using Optical Coherence Tomography Angiography, Zaid Mammo, University of British Columbia

Exploring a novel for histamine in Glaucoma, Philippe Monnier, University Health Network

Targeted Muller Glia Reprogramming for RGC Replacement: A Translational Approach to Glaucoma, Yacine Touahri, University of Toronto, Sunnybrook Research Institute

Ocular Rigidity (OR) as a risk factor for progression of open angle glaucoma: Prospective Study Including Evaluation of Vasospasticity,
Mark Lesk, Santiago Constantino, University of Montreal, Maisonneuve-Rosemont Hospital

Is Hearing Loss in Glaucoma a Marker of Shared Neural Degeneration,
Neeru Gupta, Ronald Adjekum, University of British Columbia

**Thank You Supporters Your 2025
Donations Made These Grants Possible**

Please continue to donate so that the Glaucoma Research Society of Canada can award more research grants in 2027

**A Special Thanks to
All Our Research Grant Reviewers**
Check Out Who They Are on Our Website



**Dr Rajiv
Bindlish
Answers Your
Questions
About
Glaucoma**

Are glaucoma drops a lifetime chore?

Usually, yes. Once you start using glaucoma drops, you will likely continue unless another treatment, such as laser or surgery, reduces or replaces the need for them. There is currently no cure for glaucoma; treatments only slow its progression. Your eye doctor will monitor you regularly and may adjust your treatment over time.

Should laser peripheral iridotomy always be done to prevent glaucoma?

Studies show that laser peripheral iridotomy does **not** always need to be done routinely to prevent narrow-angle or closed-angle glaucoma, and it is not always fully protective. Eye doctors recommend it when it is appropriate for the individual patient, based on how narrow the angle is and whether symptoms or early glaucoma damage are present.

Can any glaucoma treatments restore vision loss?

Not at this time. Current treatments can slow or stop further vision loss, but they cannot restore vision that has already been lost. Research is ongoing.

Is there any activity, food, or exercise that slows glaucoma deterioration?

Unfortunately, no specific diet or activity has been proven to slow glaucoma damage. However, staying active is good for overall health and may help you manage your glaucoma more effectively.

Avoid smoking, and certain yoga positions that place your head below your heart, as these can raise eye pressure.

What do clinical trials show about vitamin B3 for glaucoma?

Some early studies suggest that vitamin B3 may help protect retinal cells under high pressure and may slow visual field loss. However, these studies are short-term, and the benefits are not yet proven.

Talk to your eye care provider before taking vitamin B3, as high doses can affect the liver.

How long do the benefits of laser treatment for open-angle glaucoma last?

It varies from person to person. Laser treatment can work for months to years, but its effect may fade over time. Regular follow-up visits are essential so your doctor can check whether it's still working and adjust the treatment if needed.

**Email Your Questions
about Glaucoma to:
info@glaucomaresearch.ca**

Is Glaucoma an Autoimmune Disease?

Studies in both humans and animals show immune activity such as antibodies and T-cells reacting to heat-shock proteins in eyes affected by glaucoma. Animal models also show optic nerve damage accompanied by immune-cell infiltration.

While intriguing, this evidence is not yet strong enough to classify glaucoma as an autoimmune disease. *Clinical & Translational Immunology, 2020*

Iron Overload Raises Glaucoma Risk

A large international study found that people with excess iron in the body were more likely to develop ocular hypertension and primary open-angle glaucoma.

The findings suggest that managing iron levels may help reduce glaucoma risk and that iron imbalance is a potentially modifiable factor in eye health. *Translational Vision Science & Technology, December 2025*

Weight-Loss Drugs May Lower Glaucoma Risk

A large study showed that overweight or obese people using GLP-1 medications were far less likely to develop ocular hypertension or glaucoma than those taking older weight-loss drugs.

Over three to five years, GLP-1 users showed a 50–66% lower risk. The results suggest a promising added benefit of these medications. *Ophthalmology, August 2025*

Faster Glaucoma Progression Linked to Higher Fall Risk

A long-term study of people with glaucoma found that those whose visual fields worsened more quickly were more likely to report falling in the past year and to feel afraid of falling.

The findings highlight the importance of monitoring visual field changes to help identify patients who may be at higher risk. *Ophthalmology, July-August 2025*

Omega-3 Fatty Acids May Help Lower Glaucoma Risk

A large UK study found that people with higher levels of omega-3 fatty acids in their blood were less likely to develop primary open-angle glaucoma.

The protective effect appeared stronger in those with a high genetic risk for the disease. *Investigative Ophthalmology & Visual Science, August 2025*

Glaucoma May Be Linked to Sleep-Wake Disorders

A large California study found that people with glaucoma were slightly more likely to have sleep-wake disorders, including circadian rhythm sleep disorders.

The reasons for this connection are still unclear, and researchers recommend further study. *American Journal of Ophthalmology, October 2025*

Dr Rajiv Bindlish Answers Your Questions continued ...

How can I tell if I'm using my eye drops effectively?

The only reliable way is through regular checkups. Your eye care provider will measure your eye pressure and check your visual field. If your pressure is controlled and your visual field is stable, you are likely using your drops correctly.

Is the risk of glaucoma higher with age, and is it genetic?

Yes. The risk of glaucoma increases as we get older. There is also a genetic component – if a parent or sibling has glaucoma, your risk is higher. Regular eye exams are the only way to detect glaucoma early at any age.

How can I slow down vision loss from glaucoma?

The most effective steps are regular eye exams for early detection, using your prescribed treatments such as eye drops consistently, and keeping all follow-up appointments. These help your doctor monitor changes and adjust treatment to protect your vision.

Physical Activity Not Linked to Glaucoma

Researchers analysed Fitbit data from more than 8,000 adults to see if daily activity levels, such as step counts or minutes spent lightly active, were associated with primary open-angle glaucoma. Across all analyses no meaningful link was found between physical activity and glaucoma diagnosis. *Journal of Glaucoma, January 2026*

Congratulating Mabel Barnard on her 100th Birthday!



Long-time GRSC supporters Mabel Barnard with her husband Frank, and sister Isabel Beaton on Mabel's 100th Birthday, August 17, 2025

Air Pollution and Social Factors May Influence Glaucoma Risk

A large UK study following nearly 380,000 adults for over 12 years found that people exposed to higher levels of ultrafine air pollution particles were more likely to develop glaucoma. The risk was greatest among participants living in areas of higher socio-economic deprivation.

These findings suggest that both environmental and social conditions may contribute to glaucoma development. However, pollution data were only available for a short period (2015–2017), so changes in air quality over time weren't captured. *American Journal of Ophthalmology, December 2025*

Highlights from the 2025 Annual Supporters' Meeting

The Glaucoma Research Society of Canada held its Annual Supporters' Meeting as a live webinar on Thursday, October 22, 2025. Treasurer Tom Gottlieb started the event by thanking supporters for helping make another successful year possible.

President James Parks introduced the Board of Directors with a slideshow that showcased their professional backgrounds. He emphasized that their volunteer efforts help the Society keep administrative costs low.

Mr. Parks presented the 2025 Recognition Awards to:

- **Dr. Michael Balas** for his contribution to the "My Glaucoma Journey" webinar
- **Sally Mitzel** for her contributions made on behalf of her late husband Mel Mitzel
- **Lynda Martin** for her generous contributions
- **Jasmin Ellen** of Gatewest
- **Wendy Ungar** on behalf of her late parents Goldie & Stanley Ungar.

On behalf of the Board, Mr. Gottlieb also congratulated Ms. Norlan Roberts on her 2nd year anniversary as the Society's Office Administrator.

Before presenting the Treasurer's Report, Mr. Gottlieb shared insights into the Society's month-to-month operations. He reminded attendees about the upcoming fundraising 5K *Walk for Research* and encouraged them to participate.

In his report, Mr. Gottlieb announced that the Society had awarded \$227,557 in grants to fund 13 glaucoma research projects across Canada in 2025 and thanked donors for making these grants possible. Mr. Gottlieb noted that the 2025 amount was significantly lower than the \$350,000 distributed in 2024. He attributed this to postal issues affecting our mail-in donations as a large percentage of our supporters donate through the mail rather than online.

Dr. Trope then introduced Dr. Ellen Zhou, the keynote speaker of the **15th Annual Albert Waxer Lecture**. Dr. Zhou delivered an engaging presentation on "*Keeping Sight in Sight: The Critical Role of Medication Compliance.*"

After the lecture, Board Director Dr. Catherine Birt moderated a lively Q&A session with Dr. Zhou, Dr. Matthew Schlenker and glaucoma specialist and board member Dr. Cindy Hutnik.

To close the meeting, Mr. Parks presented Dr. Zhou with a Certificate of Appreciation and thanked everyone for attending.

For those who missed the event, a recording of the 2025 Annual Supporters' Meeting is available at www.glaucomaresearch.ca or by emailing info@glaucomaresearch.ca.

A FREE WEBINAR FOR NEWLY DIAGNOSED GLAUCOMA PATIENTS

My Glaucoma Journey

A free webinar presentation on the basics of glaucoma for newly diagnosed glaucoma patients

June 4th, 2026 @ 8:00pm EST

Presented by:



Glaucoma Research
Society of Canada

Includes a question and answer period with an expert panel of **CANADIAN GLAUCOMA SPECIALISTS**

Presented by:



Dr. Michael Balas
MD

Moderated by:



Dr. Graham Trope
MD, PhD, FRCSC

Q & A Panel:



Dr. Gary Miller
MD, FRCSC



Dr. Catherine Birt
MA, MD, FRCSC

TOPICS INCLUDE:

What is Glaucoma | What to Expect | Risk Factors | Family Connections | Testing Basics | Treatment Options
How to take glaucoma medication & why it matters | How to make the most of your eye health appointments



Scan the QR code or visit: <https://www.glaucomaresearch.ca/mgj-registration> to register for this live webinar

This seminar is supported through an unrestricted educational grant from Théa Pharma Canada Inc.



SAVE THE DATE!

**The Glaucoma
Research Society
of Canada's 2026
Annual Supporters'
Meeting & 16th Annual
Albert Waxer Lecture
will be held online on
Wednesday October 21**

Please check our website
www.glaucomaresearch.ca
closer to the date for more
details.

GRSC Welcomes New Board Member Robin de Mercado



Robin de Mercado has extensive experience in corporate operations, strategic planning, sales, marketing, corporate real estate and contract management and negotiations. Retired in 2002 at age 48, he now focuses his energies on philanthropy with an emphasis on Glaucoma and Alzheimer's research in conjunction with the Schulich School of Medicine at the University of Western Ontario.

How Your Donations Contribute to New Glaucoma Knowledge

The Glaucoma Research Society of Canada (GRSC) is the only non-profit organization in Canada exclusively dedicated to funding glaucoma research. A recent analysis examined the impact of GRSC-funded projects from 2010 to 2020, measuring their contribution to the scientific community in peer-reviewed publications and major ophthalmological conference presentations in North America.

Thanks to generous donor support, GRSC funded 135 research projects over this 11-year period, distributing a total of \$2,220,822 in grants. Researchers found that:

- **62%** of funded projects resulted in at least one published, indexed scientific paper
- **50%** were presented at major national and international vision conferences
- altogether, GRSC funding led to **92 publications** and **85 conference presentations**.

The average cost to produce a single publication was \$24,139.00 CAD, while the cost per conference presentation was \$26,127.31 CAD. Researchers also noted a significant rise in research costs during the study period, attributed to factors such as inflation, pandemic-related disruptions, and supply shortages.

Despite these challenges, GRSC-funded research maintained a high level of output and impact, comparable to that of much larger international organizations with multimillion-dollar budgets. This impressive productivity underscores the value of GRSC supporters' contributions and their role in advancing the understanding of glaucoma.

GRSC remains a vital force in Canadian glaucoma research, helping scientists and clinicians get closer to unraveling the disease's cause, and ultimately, to finding a cure.

(Full details of the research into the impact of 11 years of Glaucoma Research funding from the Glaucoma Research Society of Canada can be found in the June 11th, 2025 issue of the Canadian Journal of Ophthalmology titled "Impact of 11 years of glaucoma research funding: Glaucoma Research Society of Canada (2010–2020)" by authors William Herspiegel, Melina Moeinkhah, Dr. Anastasiya Vinokurtseva, Dr. Graham Trope, and Dr. Cindy Hutnik.)

Join Us for Our Annual *Walk for Research* on Sunday, October 25!



Board members Jim Parks, Alf Kwinter, Dr. Catherine Birt and Tom Gottlieb took part in the Society's Walk for Research.

Take part in a healthy 5K walk, connect with Society Board members and supporters, and contribute to advancing glaucoma research. **Every dollar raised goes directly to funding 2027 research project grants.**

Walk with us on the historic picturesque Toronto Belt Line Trail or in your own neighbourhood. Every step counts! The more participants we have, the more funds we can raise for crucial research.

Visit our website at www.glaucomaresearch.ca during September and October to get more details. Not up for walking this year? You can still support the **2026 Walk for Research** by donating on our site.

If you have any questions, please contact Norlan Roberts, our administrator, at 416-483-0200 or 1-877-483-0204.

Glaucoma Linked to Higher Dementia Risk

A large U.S. study found that people with glaucoma were more likely to develop dementia than those without the disease. Primary open-angle glaucoma and normal-tension glaucoma showed the strongest links, while angle-closure glaucoma did not show a clear association.

The connection appeared across different genetic risk groups, suggesting glaucoma itself may play a role. *Ophthalmology, February 2026*

Visual Field Loss Can Affect Driving Safety

A review of 23 studies found that people with moderate to severe visual field loss from glaucoma tend to have more difficulty driving. Common problems included staying in the lane, reacting quickly to hazards, and driving safely at night. Those with more advanced or bilateral glaucoma were more likely to limit or stop driving and had a higher risk of motor-vehicle collisions. *Ophthalmology, July-August 2025*

Legacy Gifts: Benefits of Including the Glaucoma Research Society of Canada in Your Will

Making a difference: Naming the Glaucoma Research Society of Canada (GRSC) as a beneficiary in your will, life insurance policy or retirement savings plan can help pay for research into finding a cure for glaucoma, the leading cause of irreversible blindness.

Tax benefits: Leaving a donation of stocks, bonds or cash in your will to the GRSC will bring your estate significant tax savings.

Simplicity & Flexibility: Naming the GRSC in your will can be easy with the help of a lawyer and will give you the chance to choose how to make your gift (e.g. whether to donate cash, securities, etc.)

Honouring a loved one: Some people name the GRSC in their will as a way to honour a loved one who suffered from glaucoma.

Encouraging others to do the same: By naming the GRSC in your will, you can also inspire others to do the same, helping to build a culture of philanthropy and giving.

Providing for the future: Making a bequest can help to ensure that the GRSC will continue to be able to fund this vital research.

Please discuss the best plans with your loved ones.

If you've already left a gift to the GRSC in your will or if you are thinking of doing so, please reach out to let us know or to discuss it further. Our contact information is adjacent, and if you prefer, we can put you in touch with our **Legacy Gifts Consultant, Martin Chasson, CA, CPA. Ask our office for details or consult your tax advisor.**

Board of Directors

James M. Parks, President
Martin Chasson, CPA, CA, Past President
Thomas Z. Gottlieb, PEng, Treasurer
Mark Shaffer, MD, CCFP, FCFP, Executive Secretary
Graham Trope, MD, PhD, FRCSC, Chair, Scientific Advisory Committee
Catherine Birt, MA, MD, FRCSC, Vice-Chair, Scientific Advisory Committee
Rajiv Bindlish, MD, FRCSC, DABO
Robin de Mercado
Cindy Hutnik, BSc, MD, PhD, FRCSC
Alfred Kwinter, BA, LLB
Scott Leslie, BSc, MBA
Stuart Murray, CGMA, CPA, CGA, BSc

Scientific Advisory Committee

Graham Trope, MD, PhD, FRCSC, *Chair, Toronto*
Catherine Birt, MA, MD, FRCSC, *Vice-Chair, Toronto*
Andrew C. Crichton, MD, FRCSC, *Calgary*
Lisa Gould, MD, FRCSC, *Winnipeg*
Frederick S. Mikelberg, MD, FRCSC, *Vancouver*
Paul H. Murphy, MD, FRCSC, *Saskatchewan*
Marcelo Nicolela, MD, PhD, FRCSC, *Halifax*
Jeremy M Sivak, PhD, *Toronto*
D.P. Tingey, BA, MD, FRCSC, *London*
Yeni Yücel, MD, PhD, FRCPC, *Toronto*

Editor/Writer: Linda Joyce Ott

Contact Us at the Glaucoma Research Society of Canada

phone:

416-483-0200

1-877-483-0204 (toll-free)

e-mail:

info@glaucomaresearch.ca

mail:

1929 Bayview Avenue, Suite 215E
Toronto, ON M4G 3E8

website: www.glaucomaresearch.ca

