

Gleams

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Glaucoma
Research Foundation

Who Gets Glaucoma? Anyone.

David Mittelstein was 11 when he found out his grandmother was losing her sight to glaucoma, though he didn't fully understand the implications of the disease until years later. David, now age 16, writes in his essay, "My Inspiration":

From as early as I can remember, my grandmother has always been there for me. When my brother and I were very young, we would go with her on long walks through beautiful nature reserves to the Pacific Ocean. I always remember her as being a symbol of vitality and athleticism; sometimes she would even jog right next to my brother and me while we rode on our bicycles. However, I also have one additional pervading memory of my grandmother: the day that she was diagnosed with glaucoma.

I soon realized that my grandmother's vision would



never be the same. Though she was ultimately able to maintain her vision through the use of medication, she could no longer go on long walks with us without stumbling over an obstruction on the ground that she simply could not see. This was emotionally devastating to me as a child.

Quintin Bethge is 8. He has glaucoma. Quintin's mother and father, Wendy and Brian, have been by his side as he braved more than 11 surgeries to protect his

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Glaucoma Fellowship
Program

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As a baby, Quintin Bethge's photo and story appeared in *Gleams* and in the GRF

Quintin Bethge Annual Report. His grandparents, family and friends have donated money for glaucoma research in his honor.

David Mittelstein (pictured on the cover with his grandmother Pouran Talab) is the founder of Vision For Vision. To learn more about the Vision For Vision program and about David's efforts to combat glaucoma in his community, visit www.visionforvision.org. GRF supports Vision For Vision with free educational materials.

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Who Gets Glaucoma? Anyone.

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vision. With excellent care from glaucoma specialist, Joseph Caprioli, MD, Jules Stein Eye Institute UCLA and Pediatric Ophthalmologist, Yvette Jockin, MD, Rady Children's Hospital San Diego, and the love and support of his parents, grandparents, and friends, Quintin is leading the active life of an 8 year old boy — playing soccer, learning karate, doing Cub Scout activities, and looking out for his little sister. His glaucoma is being successfully controlled by valve implants and medications, but for Quintin his eye disease will be a lifelong condition. His grandmother Maryalice told us, "Every day I am thankful when I see Quintin doing so well."

Glaucoma is a group of eye diseases that cause damage to the optic nerve. A complicated and often misunderstood disease, glaucoma affects people of all ages and is the leading cause of preventable blindness. Quintin Bethge was born with congenital glaucoma, a relatively rare form that is especially severe and challenging to treat. When his grandparents celebrated their 50th Wedding Anniversary, they asked that in lieu of gifts, guests give a donation to the Glaucoma Research Foundation. Thanks to their generosity, \$1,719 was raised to support glaucoma research.

David Mittelstein knew he wanted to do something to help

raise awareness about glaucoma among the senior community, so others like his grandmother would not need to lose sight to glaucoma. In fall 2007, he started Vision For Vision, initially a club at his high school that is now an active non-profit community service organization of teens raising glaucoma awareness with presentations to elders at senior citizen centers. "At these presentations, I can always find someone who reminds me, just a little bit, of my grandmother. This constant reminder has been my motivation to ensure that the vision of our elders does not fade away due to an otherwise treatable condition," he said. "I truly hope that our awareness campaigns for glaucoma will save the vision of other grandparents, and allow them to enjoy the companionship of their grandchildren for the rest of their lives."

January is Glaucoma Awareness Month, but any time is a good time to talk with your family about glaucoma. We know from research that glaucoma runs in families. The genetic component of glaucoma is complex and studies are continuing to identify genes that are culpable in the disease. With early detection and treatment, vision can be preserved, but sight lost to glaucoma cannot be restored. That's why it's especially important if glaucoma is in your family, that your other family members have their eyes checked regularly.

Spotlight On Research:

Vanderbilt Eye Institute Symposium

Internationally Renowned
Scientists and Physicians Convene for 2-day Think Tank on
“Neurodegeneration in Glaucoma”

For two days in October this year, researchers collected at Vanderbilt University for a focused symposium entitled “Neurodegeneration in Glaucoma: From Mechanisms to New Treatments.” Glaucoma Research Foundation was the primary sponsor of the meeting. Unlike the current indirect glaucoma treatments that work to lower the pressure within the eye, the goal of this meeting was to discover ways to treat the disease by stopping and possibly reversing damage to the optic nerve itself.

Because the retina and optic nerve are components of the central nervous system, the time is ripe for collaborations that draw upon tools and

“The hope is that we can preserve vision before the critical point of irreversible damage occurs.”

expertise from other neurobiological systems. Of particular interest are the similarities between glaucoma and other chronic neurodegenerative diseases such as

Alzheimer’s, Parkinson’s, Huntington’s and Lou Gehrig’s disease. The hope is that by studying the mechanisms of neurodegeneration, we can identify new targets for novel therapeutic interventions to preserve vision before the critical point of irreversible damage occurs. Internationally renowned scientists and physicians participated, and eleven travel grants were awarded to educate and



David Calkins, PhD, Catalyst For a Cure Principal Investigator (left) with John Penn, PhD, Vanderbilt Eye Institute

motivate the next wave of researchers who are so important to curing this disease. Speakers elucidated the molecular and cellular mechanisms that are delicately balanced between programmed cell survival and programmed cell death in glaucoma.

The 2008 Vanderbilt Symposium had twice as many the attendees as the meeting in 2006, indicating the growing scientific interest in this research approach to glaucoma.



Article by Allen B. Poirson, PhD, director of Scientific Programs and Licensing for Glaucoma Research Foundation

People Making A Difference

Silicon Valley Chapter Previews New Report: “Funding Research for a Cure is not a National Imperative”

“Finding a cure or therapies that can avert the threat of glaucoma is simply not an urgent national imperative,” **Allen Poirson PhD**, the Director of Scientific Programs and Licensing for GRF, told a full house of guests at GRF’s Silicon Valley chapter fall meeting hosted by **John and Lydia Vidovich** in their Los Altos Hills estate.

“For some time now,” said **Thomas M. Brunner**, President and CEO of GRF, “our donors and stakeholders have been asking us: ‘What is being done nationally to address this pressing challenge from glaucoma?’ Now we are able to give a complete answer.” Poirson was previewing findings in his Glaucoma Research Status report, GRF’s new national survey of research trends and glaucoma funding priorities. “We documented in the government sector the low priority standing for funding new glaucoma research and the resulting small amount of new research this low standing makes possible.”

GRF board member, and chapter chair and founder **Art Takahara** opened the presentation introducing **Liz**



Distinguished guests at the Silicon Valley Lecture included (L-R): **Kuldev Singh, MD**, **Dipali Apte, MD**, **Jan Horn, MD**, **John Hetherington, MD**, **Lee Du, MD**, **Gary Cleary, PharmD, PhD**, **Jane Weston, MD**, **Eva and**

Kniss, bringing greetings from the Santa Clara County Board of Supervisors. Distinguished guests attending included: **Nabuko Saito Cleary and Gary Cleary PharmD, PhD**; **Judy Munnerlyn**; Sly Dog Cellars partner **Robert Burnley** from Napa; several prominent physicians including **Drs. George and Eva Hewes**, Kaiser’s **Dipali Apte, MD** and **Lee Du, MD**, GRF board member **Kuldev Sing, MD** from Stanford; **Janet Fox, PharmD** from Pfizer; Los Angeles philanthropist **Robert Drabkin**; **Ron Drabkin**

from UCSF’s That Man May See board of directors; and **Gladys and George Weston, DDS**, sponsors of the Daniel Scott Weston Glaucoma Lecture, there with daughter **Jane Weston, MD** and husband **Jan Horn, MD**.

Wilmoth Family Challenge Match

Inspired by five-year old son **Christopher’s** resilience as he copes with glaucoma, and the efforts of daughters **Cate (12)** and **Tess (8)** to raise money for GRF, **Cathy and Charlie Wilmoth** announced a \$5,000 challenge

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People Making A Difference

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for new and increased donations – doubled on the spot by a GRF board member, making a matching pool of \$10,000. Their announcement came at an event they hosted in their Mill Valley home for GRF board members, donors and neighbors, drawing guests including **Judith Snyder** from the Marin Glaucoma Support Group, **Jayne Wenger**, and **Barbara Holt**.



Robert Nevins presents the 2008 Vision Award to GRF co-founder John Hetherington, MD at a reception hosted by the Baccarat Boutique in San Francisco.

In Appreciation

Our deepest appreciation for the generosity of our donors at the \$1,000 level and above, including members of **The Catalyst Circle, The Blanche Matthias Society**, and institutional donors.
(Contributions of record from July 1, 2008 to November 30, 2008)

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Shaffer International Glaucoma Fellowship Program

By Sunita Radhakrishnan, MD

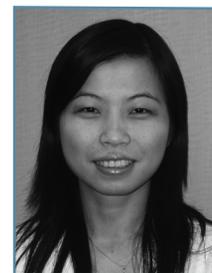
Every year, the Glaucoma Research and Education Group (GREG) in San Francisco sponsors an international ophthalmologist for an 18-month Clinical Research Fellowship. The International Fellow has the opportunity to perform clinical research in glaucoma as well as to refine his/her skills in the diagnosis and management of this complex group of eye disorders. An additional intent of the program is that the fellow will take the training and clinical skills back to his/her native country, so as to widen the circle of knowledge and help for people with glaucoma.

During the training period, each fellow is assigned 1-2 comprehensive research projects and he/she is actively involved in all aspects of the process including study design, data collection, data analysis, presentation of results at major national scientific meetings — such as the Association for Research in Vision and Ophthalmology (ARVO) and the American Academy of Ophthalmology (AAO) — and preparation of manuscripts for submission to leading peer-reviewed ophthalmology journals.

Lidiya Rudavska, MD, the 2007-2008 fellow from Lviv, Ukraine completed her training in August 2008. Chan Li, MD, the incoming fellow from the People's Republic of China joined

us in November 2008 and like our previous fellows, she will have the opportunity to select and execute research projects integrated with her specific interests.

“I would like to gain further insight into the clinical management of glaucoma in the United States,” Dr. Li said. “I look forward to researching newer methods to treat and diagnose glaucoma. The skills that I attain here will be very useful when I return to China.”



Dr. Chan Li, MD

Prior International Fellows who have completed their training at GREG include Jing Ming Shi, MD from People's Republic of China, Umit Aykan, MD from Turkey, Mariana Mata Plathy, MD from Venezuela, and Roberto Fiallos, MD of El Salvador.

The program is named for Dr. Robert Shaffer (1912-2007), the world-renowned glaucoma specialist who started the Shaffer Fellowship in 1961. The Glaucoma Research Foundation is a major sponsor of GREG and the International Glaucoma Fellowship Program.

Sunita Radhakrishnan, MD is Research Director, Glaucoma Research and Education Group

Glaucoma Insights

By Robert L. Stamper, MD

“What Can I Do To Prevent Glaucoma?”

A: Currently, regular eye exams are the best form of prevention against significant glaucoma damage. Early detection and careful, lifelong treatment can maintain vision in most people. In general, a check for glaucoma should be done:

- before age 40, every two to four years
- from age 40 to age 54, every one to three years
- from age 55 to 64, every one to two years
- after age 65, every six to twelve months

Anyone with high risk factors should be tested every year or two after age 35. Those at higher risk include people of African descent, people with diabetes, and people with a family history of glaucoma. You are at increased risk if you have a parent or brother or sister with glaucoma.

Timely And Appropriate Treatment Are Key

While there are no known ways of preventing glaucoma, blindness or significant vision loss from

glaucoma can be prevented if the disease is recognized in the early stages. In its most prevalent form—primary open angle glaucoma—vision loss is silent, slow, and progressive. It typically affects side vision first (peripheral vision) and as it progresses, central vision is lost. Glaucoma medications slow the progression of glaucoma by reducing elevated intraocular pressure (IOP) to prevent damage to the optic nerve. Surgical treatments are also available.

Benefits Of Exercise

A regular program of moderate exercise will benefit your overall health, and studies have shown that moderate exercise such as walking or jogging three or more times every week can have an IOP lowering effect. The benefits from exercise last only as long as you continue exercising; this is why moderate exercise on a routine basis is recommended. Yoga can be beneficial, but it's best to avoid inverted positions such as headstands and shoulderstands, as these may increase IOP. Talk with

your doctor if you have specific questions or concerns about starting an exercise program.

Protect Your Eyes

Wearing protective eyewear is important when engaged in sports activities or home improvement projects. Eye injuries can result in traumatic glaucoma or secondary glaucoma, so protecting your eyes from injury is another way to prevent glaucoma. For more information about different types of glaucoma, visit the Glaucoma Research Foundation website at www.glaucoma.org/learn or talk with your eye doctor.



Dr. Stamper has been Professor of Clinical Ophthalmology and Director of the Glaucoma

Service at University of California San Francisco since 1998. He has served on the Glaucoma Research Foundation Board since 1987.

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The President's Message



Dear Friends,

Happy New Year! Here at GRF, we are heartened by the kindness and generosity we encounter every day among our friends, donors, and volunteers. We talk to people with glaucoma who need help as well as people who want to help. They come to us by so many avenues – referred to GRF by their eye doctor, or by Google; some receive our Gleams newsletter and have questions, and some are passionate about vision and want to make a difference in people's lives. And in each personal encounter, we are inspired.

We wanted to share a few of these stories. Our cover story is about 16-year-old David who volunteers spreading the word of glaucoma awareness to seniors, inspired by his own grandmother's bout with glaucoma, and about 8-year-old Quintin who despite being born with glaucoma is leading an active life with the support of his family and excellent care from his eye doctors. We are grateful for all that eye doctors do to help those with glaucoma; and to our friends and donors, we thank you for your continued support and participation.

Thomas M. Brunner, President and CEO

Glaucoma

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