

Gleams

Glaucoma
Research Foundation

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Pilot Project Grants Fill Critical Gap

This year marks the fifteenth anniversary of the Glaucoma Research Foundation's Pilot Project grants to support new and promising ideas in the field of glaucoma research. GRF has invested in a broad array of pilot projects, which have led to major advances in diagnostic, pathophysiologic, and therapeutic insights into the disease.

Recently, *Ophthalmology Times* reported that fewer young scientists are seeking federal funding because the National Eye Institute (NEI) has significantly scaled back the grant money available to young or beginning scientists. GRF Pilot Project grants help fill the void in government funding of new ideas in glaucoma research by encouraging innovation and creativity in young researchers, and by providing first-stage funding for promising new glaucoma studies.



Julia Richards, PhD, in discussing results from her study "Optimizing the Search for Glaucoma Genes," commented that the GRF Pilot Project grant she obtained was "perhaps the single most productive piece of funding I have ever received." She went on to say that "Many, if not all, results are published and/or have been presented at national or international meetings. Funding [for this type of project] is incredibly hard to come up with, and the GRF contribution

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National
Glaucoma Awareness
Month
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Pilot Project Grants Fill Critical Gap

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was a critical factor in making it possible.”

GRF invests in projects that hold the most promise for increasing scientific understanding of how to protect and restore the optic nerve, how to accurately detect glaucoma and monitor its progress, to find the genes responsible for glaucoma, to better understand the intraocular pressure system, to develop better glaucoma treatments, and finally, to better determine the risk factors for glaucoma. Pilot Project research grants have covered a breadth of areas including:

- Subcellular pathophysiology (study of the nature and cause of glaucoma)
- Clinical epidemiology (scientific study of the causes and characteristics of the disease)
- Clinical/molecular genetics
- Anterior and posterior segment pathophysiology
- Drug and gene therapy
- Clinical outcomes involving both drug and surgical therapies
- Development and evaluation of new and existing diagnostic techniques.

Many of these studies have led to important advances. While some have already begun to have clinical impact on glaucoma

treatment, most have sewn seeds whose fruit will be borne over time. Such is the nature of science.

Over one hundred peer-reviewed scientific publications have resulted from GRF Pilot Project studies, many of which have had significant impact in the scientific research community. Some Pilot Project grant recipients have gone on to receive government grants from the National Institutes of Health (NIH) to continue the work made possible by seed money from their GRF grant. As grant recipient Martin Wax, MD stated in reference to his study of experimental autoimmune glaucoma, “We are confident that without GRF support, we would never have been able to accomplish our objectives.”

The GRF Scientific Advisory Committee guides the funding of Pilot Project grants, overseeing the process, and awarding up to five or six grants per year.



Paul L. Kaufman, MD is Peter A.

Duehr Professor and Chair of the Department of Ophthalmology and Visual Sciences, University of Wisconsin-Madison School of Medicine and Public Health.

Spotlight On Research:

Pilot Project Grant Recipients Announced for 2007

Every year, Glaucoma Research Foundation's Scientific Advisory Committee, comprised of eminent glaucoma researchers and specialists, thoroughly evaluates Pilot Project grant applications and advises which projects are most deserving of support.

On behalf of the Scientific Advisory Committee, I am pleased to announce the recipients of GRF's 2007 Pilot Project grants:

Grant recipient: Ruth Ashery-Padan, PhD, Tel Aviv University, Israel: \$40,000

Title of Project: Discovering the Roles of Pax6 in the Development of the Trabecular Meshwork and Schlemm's Canal in Mice

Significance: This analysis will provide an important step for the development of therapeutic strategies to treat patients with congenital and juvenile glaucoma.

Grant recipient: Donald J. Brown, PhD, University of California, Irvine: \$40,000

Title of Project: Pressure Induced Dynamic 3D Changes in Lamina Cribrosa Using Second Harmonic Imaging Microscopy

Significance: The data from this study should provide critically important insights as to how eye pressure causes vision damage.



Jack Cioffi, MD is Chairman of the Glaucoma Research Foundation's Scientific Advisory Committee, and Chief of Ophthalmology and Director of Glaucoma Service at Devers Eye Institute/Discoveries In Sight, Portland, Oregon.

Grant recipient: Christopher A. Girkin, MD MSPH, University of Alabama, Birmingham: \$40,000

Title of Project: Development of a Tree Shrew Model for

the Study of the Role of the Lamina Cribrosa in Development and Progression of Glaucoma

Significance: This model will provide a resource to study connective tissue changes within the lamina cribrosa and neurodegenerative changes in the retina, optic nerve, and brain.

Grant recipient: Sharon A. Haymes, PhD, Dalhousie University, Nova Scotia, Canada: \$40,000

Title of Project: Strategies Used by Glaucoma Patients to View Real-World Scenes

Significance: Prevention and education programs developed as a result of this study may help glaucoma patients avoid leading causes of injury, such as falls and motor vehicle collisions.

Grant recipient: Brian A. Link, PhD, Medical College of Wisconsin, Milwaukee: \$40,000

Title of Project: Using Zebrafish to Identify Genes That Promote Retinal Ganglion Cell Degeneration in the Context of Elevated Intraocular Pressure

Significance: Identification of the key genes for glaucoma allows for genetic tests leading to research for targeted therapies.

Q&A

Living With Glaucoma

Q: How often should I see my eye doctor?

A: As a newly diagnosed person with glaucoma, you may need to have your eye pressure checked every week or month until it is under control. Even when your eye pressure is at a safe level, you may need to see your doctor several times a year for checkups.

It is important that your doctor listens and responds to your concerns and questions, is willing to explain your treatment options, and is available for calls and checkups. If you do not feel confident and comfortable with your doctor, remember, you always have the right to seek a second opinion.

A good working relationship with your eye doctor is the key to effective glaucoma care.

Q: Will a diagnosis of glaucoma limit my life?



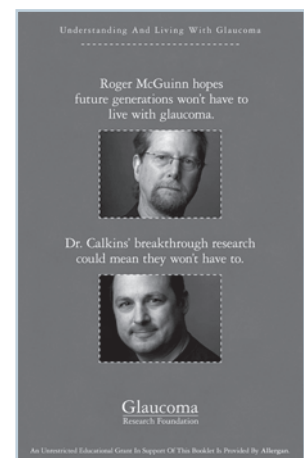
A: We are limited only by what we think we can or cannot do. You can continue with what you were doing before glaucoma was diagnosed. You can make new plans and start new ventures. And you can trust the eye care community to keep looking for better treatment methods for glaucoma. Take good care of yourself and your eyes, and get on with enjoying your life.

Q: What can I do to help others?

A: As a glaucoma patient, you have the opportunity to teach your friends and relatives about this disease. Many people are unaware of the importance of eye checkups

and do not know that individuals with glaucoma may have no symptoms. You can help protect their eye health by encouraging them to have their eye pressure and optic nerves checked regularly.

Source: *Understanding And Living With Glaucoma*. New edition now available. Call 1-800-826-6693 or visit www.glaucoma.org for your free copy.



Gleams is published three times a year by the **Glaucoma Research Foundation**.

Telephone: 415-986-3162

Toll Free: 800-826-6693

email: gleams@glaucoma.org

Producing Sponsors Set Leadership Example for Benefit

Net proceeds from Glaucoma Research Foundation's first-ever benefit — *Speeding the Cure. Spreading the Word* — set for January 24 at the Westin St. Francis Hotel in San Francisco, promises to make a significant contribution to GRF research and education programs, thanks in part to the event's Producing Sponsors: **Citigroup**, and **Deirdre Porter** (Chair of GRF's Board of Directors) and **Bradford Hall**.

"We are so grateful to our co-chairs **Allen Bouch**, Managing Director of Citigroup Global Markets, and **Gena Harper**, Senior Vice President at SmithBarney, and to our generous Producing Sponsors," said GRF President and CEO **Thomas Brunner**. "Their efforts literally meant that all of the subsequent income from tables and tickets could flow directly to our programs. This example sets a valuable precedent for events that will follow." Brunner also singled out Presenting Sponsors **Alcon**, **Allergan**, and **Pfizer**; **Melza** and **Ted Barr** who

underwrote the Research Overview; Hosting Sponsors **Cynthia** and **Fred Brinkmann**, and **Santen**; and Trailblazer Table Hosts **Lori** and **Allen Bouch**, **June Behrendt** and **Sean Otto**. Earlier, **Baccarat Crystal** saluted all the members of the Host Committee at a special reception in its Union Square Boutique. A high point of the benefit will be the presentation of The Catalyst Award to **Ted Barr** by **Steve Kirsch**.

California's fabled Silicon Valley could be the site for GRF's first "chapter" of GRF champions, thanks to the leadership of former Mountain View Mayor **Art Takahara**. Art hosted a Catalyst Update in Sunnyvale's Grand Hotel, featuring presentations by **Tom Brunner** and Stanford's highly regarded Professor of Ophthalmology **Kuldev Singh MD**,

from Santa Clara County supervisor **Liz Kniss**. As the event drew to a close, **Stephen Vidovich**, representing Grand Hotel partner **John Vidovich**, rose and presented Art with a \$10,000 contribution for GRF.

Judy Molnar with daughter **Melissa Baker** drove down from Markleeville in the Sierra Nevadas to present the \$3,000 check from the **Alpine Chamber of Commerce**, proceeds for her volunteer team staffing the luncheon tent at the **Death Ride**, the 129-mile bicycle tour over the California Alps.



Photo: Strictly Candid by Margaret Abe
Art Takahara, center, gathers with guests at his Silicon Valley event, including GRF board chair Deirdre Porter and Kuldev Singh MD (right), and Tom and Wallace Brunner (left).

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 July 15 to November 28, 2006)

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* Includes commitment as member of the Host Committee for the January event

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The President's Message



Dear Friends,

January is **National Glaucoma Awareness Month**, an important time to spread the word about this sight-stealing disease. Glaucoma is the leading cause of preventable blindness. Everyone, from infants to seniors is vulnerable. Moreover, among African-American and Hispanic populations, glaucoma is the leading cause of blindness.

Over 3 million Americans, and nearly 70 million people worldwide, have glaucoma. Experts estimate that half of them don't know they have it. Combined with our aging population, we can see an epidemic of blindness looming if we don't raise awareness about the importance of regular eye examinations to preserve vision.

The most common type of glaucoma—primary open angle glaucoma—is hereditary; so if you do have glaucoma, don't keep it a secret. Let your family members know they are at increased risk.

Coinciding with Glaucoma Awareness Month, the four scientists leading GRF's innovative Catalyst For a Cure research consortium will present an update highlighting insights from their recent research investigations at *Speeding The Cure, Spreading The Word*, a benefit event on January 24th in San Francisco.

In addition, GRF is proud to announce the recipients of our 2007 Pilot Project Grants. See Jack Cioffi, MD's article on page 3 for details of this year's grants.

Remember, regular eye exams may help prevent unnecessary vision loss. As always, we appreciate your support, your ideas, and your participation.

Thomas M. Brunner, President and CEO

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251 Post Street, Suite 600
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