Working Together to Find a Cure
The Foundation Fighting Blindness is urgently driving the research that’s putting an end to the entire spectrum of vision-robbing retinal degenerative diseases.

Since 1971, the Foundation Fighting Blindness has raised more than $275 million in support of its mission to find preventions, treatments, and cures for blinding conditions such as macular degeneration, retinitis pigmentosa, Stargardt disease, and Usher syndrome. Collectively, these diseases affect more than 9 million people in the United States.

The Foundation is the largest non-governmental supporter of retinal disease research in the world.

Thanks to funding from the Foundation, human studies are now underway for gene therapy to cure blindness in children. Later-stage clinical studies of a tiny capsule that has the potential to save vision are also being conducted for retinitis pigmentosa, macular degeneration, and Usher syndrome.

The Foundation funds innovative research in a number of scientific areas including genetics, gene therapy, stem cell therapies, neuroprotection, and nutrition, at prominent institutions around the world.

Thanks to the Foundation’s tireless efforts, all people with retinal degenerative diseases have hope for a future without blindness.
TABLE OF CONTENTS

2 Letter from the Chairman and CEO
4 Information, Events and Advocacy
8 2007 Research Highlights

10 Up Close
  Jack Wiedmer
  A Vision for Life
  Blake Chadwick
  Putting the Squeeze on Blindness
  Derrek Lee
  Home Runs and Hope
  Jane Gardner
  Living with RP is a Family Affair

18 2007 Research Grants

28 How You Can Help

30 2007 Financial Statement

32 Leadership

INSIDE BACK COVER
National Chapters

For additional copies of this publication or further information on the Foundation Fighting Blindness, please call 800-683-5555 or visit us at www.FightBlindness.org
Letter from the Chairman and CEO

The past year has been nothing short of remarkable in our search for treatments and cures to overcome blinding retinal degenerative diseases.

Human studies are now underway for a gene therapy to cure a devastating form of retinitis pigmentosa that causes blindness at birth called Leber congenital amaurosis. It’s a treatment that started with a gene discovery in 1993, canine studies in 2000, and intensive work with scientists and regulatory organizations over the past few years to get the trials underway. The Foundation is funding three separate clinical trials of Leber congenital amaurosis gene therapy, and we funded much of the preclinical work that made these human studies possible.

Also in 2007, the Foundation helped advance an innovative treatment—a tiny, implantable capsule—into later-stage clinical trials. More than 150 people affected by a wide range of retinal degenerative diseases—including retinitis pigmentosa, age-related macular degeneration, Usher syndrome, and choroideremia—are participating in these Phase II/III studies. It’s been seven years since a pivotal Foundation-funded study demonstrated this treatment’s potential for saving vision.

As we look forward to next year, a clinical study of gene therapy to treat a juvenile form of macular degeneration known as Stargardt disease is planned, and we are making excellent progress in working toward clinical studies of gene therapy for Usher syndrome, choroideremia, and retinoschisis.

As you well know, these advancements take money, passion, ingenuity, experience, and courage—the courage to move forward despite inevitable failures along the path to finding treatments and cures. This business of fighting blindness is not for the faint of heart.

But as we look at our growth and success—especially the scientific, financial and organizational achievements we’ve had in recent years—there is one element that is key to all of our forward progress, and that is people; not just a handful of uniquely talented or privileged people, but everyone who in some way decides to participate in the Foundation’s mission.

Over the past year, we have had an incredible outpouring of support from people of all ages and backgrounds, including the thousands that participated in VisionWalk, attended a dinner or wine tasting, or gave us a gift in response to an online campaign.

Much of the Foundation’s success is due to the growth in local chapters. Thanks to the tireless efforts of volunteer chapter leaders and members, the Foundation is reaching countless communities across our country. People are doing a great job in getting the word out about the impact of retinal diseases, and the need for research to overcome them.

We are even reaching out to Congress about the critical need for eye research. During a recent Foundation-hosted briefing on Capitol Hill, Congressman Pete Sessions of Texas spoke passionately about the need to fund eye research, noting that vision loss costs our
country $68 billion a year. Congressman Sessions is an advocate of exploring all of the different tools that can be used to fight eye diseases. And one of those options involves stem cells. He said, “We need to find out what stem cells can do for us in order to make wise public policy.”

In this year’s annual report, we tell the stories of four individuals and their families who highlight the passion for our mission to eradicate retinal degenerative diseases.

We report on Chicago Cubs’ Derrek Lee and his wife Christina who are using their strong presence in the community to help find a cure for their daughter who is affected by Leber congenital amaurosis.

We tell the story of Jack Wiedmer, a man with boundless energy and determination, who doesn’t let macular degeneration temper his enthusiasm for living or supporting the fight against blindness.

Incredibly, Jane Gardner has 28 family members affected by retinitis pigmentosa. She is supporting the Foundation so that future generations of her family won’t have to struggle with vision loss.

And finally, we feature eight-year-old Blake Chadwick, who raised an impressive amount of money for research with a lemonade stand. He was inspired to help find a cure for his brother who has retinitis pigmentosa. A young man of few words, Blake simply said this about his brother: “I just don’t want him to go blind.”

There’s an enormous amount of work yet to be done in 2008 and beyond to overcome vision-robbing retinal degenerative diseases. But thanks to our growing and diverse community of passionate supporters, we are winning the fight against blindness. Thank you for all you do.
Nancy Kerrigan: A Champion for our Cause

This year, figure skater and Olympic champion Nancy Kerrigan became a spokesperson for the Foundation Fighting Blindness. Nancy made personal appearances at our national signature event VisionWalk, at our annual VISIONS conference, and at our Shades of Spring gala in Boston. Nancy was inspired to support the Foundation because her mother, Brenda, is blind.

During 2007, the Foundation was prominently promoted as the official charity of Nancy Kerrigan’s World of Skating television series, on other Nancy Kerrigan national television broadcasts, and on CountDown to Sports, a multi-sport television series that previews upcoming collegiate and professional sporting events.

During these programs, the Foundation was highlighted through public service announcements featuring Nancy Kerrigan, a vignette telling the story of two young boys affected by a retinal disease, and opening and closing program credits. A link to FFB was also posted on the shows’ websites.

VisionWalk: Taking Steps to Find a Cure

Volunteers all across America have been literally pounding the pavement to increase awareness and raise research dollars through VisionWalk, FFB’s national signature fundraising event. Last year these walks took place at sixteen locations. Thirty are scheduled for the upcoming year. Our VisionWalk website (www.VisionWalk.org) provides participants with the tools to easily set up web pages associated with the event,
VisionWalk
Raleigh, North Carolina
Nancy Kerrigan, Reston
Mattox, and Conrad.
plus email communication capabilities to mobilize friends and family for easy online donations. Last year, VisionWalk collectively brought in $1.8 million dollars to help support our cause. These walks are providing participants with an easy way to get involved, raise money, and have some fun at the same time.

Special Events
Thanks to the support of volunteers all across the country, in addition to our walks, the Foundation hosts hundreds of events throughout the year. From golf tournaments to gala dinners to wine tastings, these special events are critical to our fundraising success.

This year we introduced Dining in the Dark in Orange County, California, a new fundraising event that takes people through a journey of taste, sound, and touch, all in the dark. This unique dinner, served by visually impaired wait staff, gives attendees a unique opportunity to experience, if only for a few hours, what it is like to be visually impaired. Several Dining in the Dark fundraisers are scheduled for the upcoming year.

Educational Symposia
The success of our nationwide Vision Seminar Series is proof that the public is eager for educational information about diseases such as macular degeneration, retinitis pigmentosa and Usher syndrome. Thanks to a generous unrestricted educational grant from Genentech, thousands of people attended these one-day symposia featuring presentations by physicians, researchers, FFB staff members, and low-vision experts on the latest treatments, clinical trials, and daily living information. Eleven seminars are scheduled for the upcoming year.

VISIONS Conference
The Foundation’s VISIONS 2007 Conference in Kansas City brought together almost 400 people from around the country to hear about the latest research for retinal degenerative diseases, learn about daily living strategies and connect with others to make new friends. Attendees participated in a wide range of sessions and activities and came away informed, inspired and optimistic about the future. VISIONS 2007 was a landmark event for people with retinal degenerative diseases; for the first time, reports on human clinical trials for promising treatments dominated many of the conference’s presentations and discussions. Attendees were particularly excited to hear first-hand accounts from clinical trial participants. VISIONS 2007 provided great news for the millions of people who are counting on emerging treatments to save and restore their vision. Sponsors included Genentech, Alcon, Delta Gamma Foundation, Pfizer, (OSI) Eyetech, Sirion Therapeutics, and Oxford BioMedica. Plans are already underway for VISIONS 2008 in Washington, D.C. on August 8-10.

Spreading the Word
Throughout the year, the work of the Foundation Fighting Blindness, and the events held on our behalf, was reported in print and electronic media across the country. The media can play a large role in providing information to those affected through television, radio and newspaper stories. Stories on VisionWalk generated impressive media coverage in each of the walk locations throughout the country.
Radio public service announcements (PSA) are another great way to reach out to hundreds of thousands of people all across America. In addition to our television public service announcements with Nancy Kerrigan, the Foundation produced two radio PSA campaigns this year and distributed them to more than 6,000 radio stations nationwide. The AMD Alliance provided a generous educational grant to help offset costs of one of these important educational initiatives. Not only do the spots help to generate awareness about FFB and our mission, but listeners can call a toll-free phone number to obtain a comprehensive, free information packet for themselves or for a family member or friend.

Advocacy

While we are working tirelessly to find treatments and cures, we also recognize that we cannot do it alone. Last year, through letter writing campaigns and personal visits to Capitol Hill, we encouraged increased funding for the National Eye Institute. Increases can ultimately translate to additional resources for retinal degenerative diseases.

In addition, we were successful again last year in securing substantial funding from Congress for our National Eye Evaluation Research Network to conduct clinical trials for rare retinal diseases and dry macular degeneration.

Through our new online grassroots advocacy program we are continuing to build a loyal network of supporters who are ready to champion the issues most important to FFB.

Providing Information, Answers and Hope

More than 15,000 calls came in to our Information Department last year from people requesting information. The Foundation provides educational booklets and brochures on a variety of retinal diseases including treatment options, scientific advances, low vision and support resources, and genetic testing information.

Additionally, each month more than 60,000 people visit our website, www.FightBlindness.org, to find out the latest information on treatments, research, clinical trials, physician referrals, coping assistance, and to read hopeful stories about others who are living with a retinal degenerative disease. Our popular message boards help people connect with others for support, and our regularly scheduled chat sessions give people an opportunity to have their questions answered by doctors and research experts.

Also in the past year, more than 125,000 households received our newsletter, InFocus, and 95,000 people read about the latest breakthroughs via InSight, our electronic newsletter sent out six times a year to individuals through email.
CLINICAL TRIAL is the scientific term for a test or study of a drug or medical device in people. These tests are done to see if the drug or device is safe and effective for people to use. Doctors, health professionals, and other researchers manage the tests according to strict rules set by the Office for Human Research Protections and the Food and Drug Administration.

1. Potential Cure for Children Born Blind Moves into Human Studies

Thanks to an innovative gene therapy, children born blind from Leber congenital amaurosis (LCA) may no longer face a lifetime of darkness. Three clinical trials are now underway for a gene replacement therapy—replacing a bad gene with a good gene—that shows great promise for giving eyesight to children with LCA. It’s the same treatment that gave vision to the world-famous canine, Lancelot, and 50 of his relatives, all of whom were blind from LCA. The Foundation-funded clinical studies are taking place at Children’s Hospital of Philadelphia, University of Pennsylvania, and Moorfields Eye Hospital at the University College of London.

2. Clinical Studies of Tiny Capsule Provide Hope for Saving Vision for Many

A tiny implantable capsule the size of a grain of rice may be the key to saving vision in people affected by a variety of retinal degenerative diseases including age-related macular degeneration, retinitis pigmentosa, Usher syndrome, and choroideremia. Three Phase II/III clinical trials of the device, known as Encapsulated Cell Technology, are now underway. The capsule works by providing sustained release of a protein that shows potential for keeping the retina healthy, and ultimately, saving and restoring vision.
3. Stem Cell Advancements Provide Hope for Retinal Rescue and Regeneration

During the past year, researchers made landmark advances in the development of stem cell therapies for retinal degenerative diseases, moving ever closer to finding ways to use stem cells to build new retinas and rescue retinal tissue damaged by disease. Investigators from the University of Michigan learned how to coax stem cells into becoming new retinal cells and tissue. Scientists from the University of Wisconsin, Madison, and Oregon Science and Health University demonstrated how stem cells could be used to deliver vision-preserving proteins to the retina. The Foundation’s Stem Cell Consortium, a group of the world’s leading stem cell experts, continues to work collaboratively and aggressively to move these promising advances into human studies.

5. DHA May Slow X-Linked Retinitis Pigmentosa—Clinical Study Underway

A nutrient called DHA, which is abundant in coldwater fish such as salmon and tuna, may slow vision loss in people with X-linked retinitis pigmentosa (XLRP). Clinical investigators from the Retina Foundation of the Southwest launched a human study of DHA supplementation for people with XLRP. Experts believe that DHA may be most beneficial to younger people affected by the condition. Other Foundation-funded research studies have suggested that DHA may be beneficial to people affected by age-related macular degeneration, Stargardt disease (dominant form), and other forms of retinitis pigmentosa.

6. Partnership Formed to Launch Trial of Gene Therapy for Stargardt Disease

Thanks to a new partnership between the Foundation and Oxford BioMedica, a biopharmaceutical company in the United Kingdom, a clinical study of an emerging gene therapy for Stargardt disease is being planned for 2008. The new treatment shows excellent potential in halting vision loss from Stargardt disease, a condition that strikes adolescents and young adults, often leading to significant vision loss. Known as StarGen, the treatment may also be effective in people with certain forms of cone-rod dystrophy and retinitis pigmentosa.
Macular Degeneration
A retinal disease that affects more than 9 million people in the U.S. There are two types of macular degeneration. One form is known as “wet” and the other is “dry”.
From working for *LIFE* magazine to flying airplanes, **Jack Wiedmer** has experienced life in bold and majestic ways. He founded the St. Louis Chapter ten years ago after losing his sight to macular degeneration, and is using his considerable talents to help drive research.

**Up Close: Jack Wiedmer**

**A Vision for Life**

Jack Wiedmer has seen a lot during his lifetime. At his graduation from Westminster College in Fulton, Missouri, he saw Winston Churchill deliver his famous Iron Curtain speech which began to define the era of the Cold War. Working in television advertising in the late 40s and 50s, Jack witnessed the rise of the golden age of television where he met the likes of Red Skelton and Edgar Bergen and created the program “The Arthur Murray Dance Party.” He worked in New York at CBS, and for many years at *LIFE*, a magazine with a strong emphasis on photojournalism. Jack has seen the beauty of the world from the cockpit of the planes he loved to fly. And as an avid fly fisherman, he watched the graceful, rhythmic flow of his line as he cast his lure into a stream filled with rainbow trout.

But today, Jack can no longer fly a plane, or tie a fly to the end of a fishing line, or even see the faces of friends and loved ones. That’s because Jack is legally blind from **macular degeneration**, a retinal disease that affects more than 9 million people in the United States.

Twenty years ago, after a hemorrhage in his left eye, Jack was diagnosed with wet macular degeneration—the most severe form of the disease. Eventually the disease also affected his right eye. At the time, the only available remedy was a series of laser treatments to stop the bleeding. Unfortunately those treatments could not stop Jack from going blind.

“It is devastating to lose your independence and it takes some getting used to,” says Jack. “Having to rely on someone else to take you everywhere is very difficult. Thankfully I have my wonderful wife Carol who gets me where I need to go.”

But while he may need to follow his wife’s lead to get around, it is Jack that is leading the charge for the Foundation Fighting Blindness in St. Louis. For the past ten years, Jack has served as President of the local chapter and has helped raise hundreds of thousands of dollars at numerous events he helped organize.

Most recently Jack helped organize the St. Louis VisionWalk, the Foundation’s national signature fundraising event, where he and more than 250 people helped raise almost $75,000.

“The walk was fantastic,” said Jack. “I am extremely grateful to all of those that came out to support folks like me and to help the Foundation Fighting Blindness—a truly wonderful and dedicated organization. Thanks to the Foundation Fighting Blindness, we have hope that a cure will be found.”

Perhaps it’s the former advertising exec in Jack, but he has lots of ideas about how to raise funds for FFB. Although he is now 83, he has no intention of slowing down anytime soon.

“I can’t just sit around, it’s not my nature,” says Jack. “There is so much exciting research going on and if we are going to drive this thing to success, we all have to do our part. For those who are thinking about getting involved, I say, ‘don’t hesitate, just do it.’ I recognize that it may be too late for me to regain my vision, but I want to do something for the generations that follow me.”
When you think of finding a cure for blindness, the image of an eight-year-old with a lemonade stand is probably not the first thing that comes to mind. But with the help of his family, Sunkist, and the local community, a soft-spoken kid named Blake Chadwick raised an impressive $3,500 for research by selling lemonade one afternoon in his northern Kentucky neighborhood.

Blake was inspired to raise money for the Foundation Fighting Blindness because his 14-year-old brother, Zach, is losing his vision to retinitis pigmentosa. As Blake puts it, “I just don’t want him to go blind. We have fun together.”

Zach, who has lost substantial vision since he was diagnosed seven years ago, was quite impressed with his little brother’s efforts. “When I first heard that Blake was going to have a lemonade stand to raise money for research, I thought he might raise a couple hundred dollars,” says Zach. “I didn’t realize he was going to raise $3,500. I’m very proud of him.”

The boys’ mother, Robin, is Chair of the northern Kentucky/Cincinnati VisionWalk, and has been active with the Foundation for a number of years. She was also surprised at how well Blake’s lemonade fundraiser turned out. “It snowballed into this fun and meaningful event,” she says. “The Cincinnati Enquirer ran a story that morning, and we had people drive 45 minutes just to hand money to the kids. The $3,500 raised by Blake included two $1,000 matching gifts—one from Sunkist and another from Remke’s, a local supermarket.

For Zach, the disease has been aggressive; he has lost much of his peripheral vision and is completely night blind. He’s also had complications including cataracts and glaucoma. Robin said that at first, Zach’s diagnosis was very difficult for the family. “I was swimming in fear,” she says.

But shortly thereafter, the television show Good Morning America ran a story on an emerging gene therapy that gave vision to a dog named Lancelot, who was born blind from a severe retinal disease called Leber congenital amaurosis—a form of retinitis pigmentosa that also affects humans.

That story was a key turning point for Robin. “I got a ton of calls from friends who saw the story. They told me that the dog had a disease like Zach’s and now the dog can see. It gave me hope that a cure or treatment for Zach would be found,” she says. That same gene therapy is now in Foundation-funded human studies at Children’s Hospital of Philadelphia, University of Pennsylvania, and Moorfields Eye Hospital in the U.K.

Robin says, “I’ve always been told it is just a matter of time and money. The science is there.” In addition to being hopeful for a cure, she is extremely proud of how both of her boys have handled Zach’s vision-robbing condition. “Zach is very mature in ways you don’t expect. He’s had a lot to deal with, and I think he’s got the make-up to help other people through difficult periods. And I am so proud of Blake. He’s already making a difference, not only for his brother, but for countless other people.”
LEMONADE
$1.00

All Donations Go To
National Federation for the Blind
Leber congenital amaurosis is an inherited retinal degenerative disease characterized by severe loss of vision at birth. A variety of other eye-related abnormalities including roving eye movements, deep-set eyes, and sensitivity to bright light also occur with this disease.
A lot of things have gone right for Derrek Lee. He’s delighted Chicago Cubs fans with his gifted bat, smacking home run after home run out of legendary Wrigley Field. In 2005, Derrek received the most votes in National League All-Star balloting and later won his first National League batting title.

He’s also enjoyed the gifts of a loving wife, Christina, and a beautiful, young daughter, Jada. They’re his biggest fans, and Derrek is thrilled to wave to them in the stands when they come to watch him play.

But one day in 2006, things suddenly changed. Three-year-old Jada complained about discomfort in her right eye. Christina recalls how quickly and shockingly events unfolded from there: “Jada developed this pain in her eye. We called our eye doctor who told us to bring her in just for peace of mind. She told us that the chances of it being anything serious were very slim. Within 24 hours we had the initial diagnosis of Leber congenital amaurosis. Jada was blind in her right eye and the vision in her left eye was at great risk. Life for us literally changed in the blink of an eye.”

Leber congenital amaurosis is a devastating inherited eye disease; most children with the condition are born blind or with severe vision loss.

Derrek adds, “We never had any inkling that anything was wrong with her eyes...the diagnosis of LCA just knocked us to the floor.”

The Lees also took Jada to Foundation-funded researcher Ed Stone, M.D., Ph.D., of the Carver Laboratory at the University of Iowa, and that’s where the idea for Project 3000—an initiative to find all the families affected by LCA—began. “We knew right away we wanted to help find a cure,” says Derrek. “It only took us a weekend after her diagnosis to make that decision. We needed to do something. We took it as a responsibility.”

Project 3000 is a collaborative partnership of Carver Lab, the Lee family, the Foundation for Retinal Research, the Foundation Fighting Blindness, and Boston Celtics owner, Wyc Grousbeck, who has a son with LCA. The goal of Project 3000 is to identify all of the estimated 3,000 families with LCA, so that researchers will be better positioned to develop cures.

In fact, genetic testing is identifying people who can participate in Phase I clinical studies of gene therapy to treat and potentially cure LCA. These studies are now underway at Children’s Hospital of Philadelphia, Scheie Eye Institute at the University of Pennsylvania, and Moorfields Eye Hospital in London. All three studies are being funded by the Foundation Fighting Blindness.

Though Project 3000 didn’t begin until fall 2006, it has already accomplished a lot. “We’ve raised more than $1 million and found 250 more people affected,” says Derrek. “We also get a lot of questions from families and it is nice to know we can be a resource for them. It’s important for people to know there’s hope and progress. Hope is everything. You need it to get through the tough times.”

Christina wants families affected by LCA to know that there’s good reason to be optimistic. “There’s hope because we are going to find a cure...without question. There are great research teams around the world who want to make this better for you and your child. You’re not alone.”
JANE GARDNER, President of the Raleigh-Durham Chapter of the Foundation Fighting Blindness, is hopeful that research will lead to a cure for future generations of her family. Today she lives each and every day to the fullest. “I figure life is a lot like bridge, you have to play the hand you are dealt.”

Up Close: Jane Gardner

Living with RP is a Family Affair

When people learn that they have a blinding retinal disease, the news usually comes as a shock. But not for Jane Gardner. Jane was in the fourth grade when she learned she had retinitis pigmentosa, a disease that slowly robs people of their peripheral vision and can eventually lead to blindness.

Jane’s diagnosis was no surprise. Incredibly, 28 of her living relatives, between the ages of 12 and 92, have retinitis pigmentosa. And a number of them are completely blind.

“I wasn’t surprised to learn I had RP, and for the longest time, I did not think about it. Other than poor night vision, RP did not bother me very much. I just wanted to get on with my life,” said Jane.

Jane did go about her life—attending college, teaching school, and marrying a man she knew since junior high, Brown Gardner. When it came time to decide about having children, Jane and Brown understood the risks, but Brown didn’t hesitate. “I said to myself, what if Jane’s parents had decided not to have her? Jane has so much to offer and is such an outgoing, positive person.”

But as fate would have it, one of their two children, Elizabeth, was diagnosed with RP. “That was tough to hear,” said Brown, “but we picked up and moved on, and Elizabeth, like Jane, has handled her diagnosis very well and is doing great.”

Jane has now lost a substantial amount of vision. Although she has not been able to work or drive since 1999, she doesn’t focus on what she can’t do but rather what she can. She loves to travel, is an avid bridge player, is a grandmother of six, and serves as President of the Raleigh-Durham chapter of the Foundation Fighting Blindness. “It’s really important to get involved and give back,” said Jane.

Jane even helped organize about 75 family members for a gene study project to identify her family’s RP gene. Scientists are working on treatments that one-day could replace a defective gene and prevent vision loss from ever occurring. “The scientists are doing wonderful work and I am so hopeful about all of the research going on,” says Jane.

While Jane is hopeful that research will lead to a cure for future generations of her family, she lives each and every day to the fullest. “I figure life is a lot like bridge, you have to play the hand you are dealt.”
Retinitis Pigmentosa
Retinitis Pigmentosa is a group of inherited eye diseases that causes the degeneration of photoreceptor cells in the retina.
2007 Research Grants

Foundation Fighting Blindness and
National Neurovision Research Institute

Awarded Grants (July 1, 2006 to June 30, 2007)
FFB CENTER GRANTS

The following 17 FFB-funded Centers foster the collaborative efforts of independent research institutions—pairing basic scientists with clinical investigators—enabling them to better share knowledge and resources to more effectively develop promising treatments and cures.

Berman-Gund Laboratory for the Study of Retinal Degenerations
Harvard Medical School, Massachusetts Eye and Ear Infirmary, Boston, MA
Eliot L. Berson, M.D., Center Director
$372,432

Co-Investigators: Eliot L. Berson, M.D., Robert J. Brockhurst, M.D., Thaddeus P. Dryja, M.D., Alexander R. Gaudio, M.D., Tiansen Li, Ph.D., Bernard Rosner, Ph.D., Michael A. Sandberg, Ph.D., Ernst J. Schaefer, M.D., Walter Willett, M.D.

Advancing treatments for RP, LCA, choroideremia, AMD, Usher syndrome and other diseases. Identifying disease-causing genes, creating mouse models, improving clinical prediction of disease progression, and conducting clinical trials.

Children's Hospital of Philadelphia–Penn Pediatric Center for Retinal Degenerations
University of Pennsylvania, Philadelphia, PA
Jean Bennett, M.D., Ph.D., Center Director
$253,697

Co-Investigators: Jean Bennett, M.D., Ph.D., Eric A. Pierce, M.D., Ph.D., Edward N. Pugh, Jr., M.D., Ph.D.

Starting a gene therapy clinical trial for children with LCA (RPE65 gene). Focusing on disease characterization and treatments for three different genetic forms of LCA. Evaluating new treatments in animal models for potential clinical studies.

The Cleveland Clinic Foundation Research Center for the Study of Retinal Degenerative Diseases
Cole Eye Institute, Cleveland, OH
Joe G. Hollyfield, Ph.D., Center Director
$281,219

Co-Investigators: Bela Anand-Apte, M.B.B.S., Ph.D., John W. Crabb, Ph.D., Stephanie A. Hagström, Ph.D., Joe G. Hollyfield, Ph.D.

Studying AMD in humans and animals. Identifying gene and protein changes, as well as environmental causes such as oxidative damage. Will lead to identification of treatment targets for AMD.

Greater New York Regional Research Center for the Study of Retinal Degenerative Diseases
New York University School of Medicine
Edward S. Harkness Eye Institute
Columbia University
University of Medicine and Dentistry, New Jersey Medical School
New York, NY and Newark, NJ
Lucian V. Del Priore, M.D., Ph.D., Ronald E. Carr, M.D., Marco A. Zarbin, M.D., Ph.D., Center Co-Directors
$544,025

Co-Investigators: Rando L. Allikmets, Ph.D., Ronald E. Carr, M.D., Lucian V. Del Priore, M.D., Ph.D., Stephen Goff, Ph.D., Marco A. Zarbin, M.D., Ph.D.

Assessing new clinical treatments—gene replacement, neuroprotective, cell-based, and other strategies—for RP, AMD, Stargardt disease, cone dystrophy and other diseases. Identifying new disease-causing genes and their effects on vision.

Jules Stein Eye Institute Research Center for the Study of Retinal Degenerative Diseases
University of California at Los Angeles
Dean Bok, Ph.D., Center Director
$368,578

Co-Investigators: Dean Bok, Ph.D., Debora Farber, Ph.D., Alan Kreiger, M.D., Steven Nusinowitz, Ph.D., Steven Schwartz, M.D., Gabriel H. Travis, M.D., Xian-Jie Yang, Ph.D.

Testing drug, gene, and nutritional therapies in animal models of Stargardt disease for future study in humans. Clinically and genetically assessing patients.
Kearn Family Center for the Study of Retinal Degeneration
University of California at San Francisco
University of California at Berkeley
Stanford University School of Medicine
Matthew M. LaVail, Ph.D., Center Director
$519,132
Co-Investigators: Michael Danciger, Ph.D., Jacque Duncan, M.D., John G. Flannery, Ph.D., Matthew M. LaVail, Ph.D., Austin Roorda, Ph.D., Douglas Vollrath, M.D., Ph.D.
Testing neuroprotective, nutritional, cell-based and gene therapies for RP, AM D, Usher syndrome and other retinal degenerative diseases. Searching for genetic causes of these diseases. Expanding clinical assessments and measurements using high resolution retinal imaging.

W.K. Kellogg Eye Center for the Study of Retinal Degenerative Diseases
University of Michigan, Ann Arbor, MI
Anand Swaroop, Ph.D., Center Director
$498,757
Co-Investigators: Radha Ayyagari, Ph.D., Kari H. Branham, M.S., John R. Heckenlively, M.D., Bret Hughes, Ph.D., Paul R. Lichter, M.D., Thom Saunders, Ph.D., Anand Swaroop, Ph.D., Debra A. Thompson, Ph.D., Naheed Wali Khan, Ph.D., David Zacks, M.D., Ph.D.
Identifying gene variations and visual-cycle defects. Determining how these changes cause retinal degenerative diseases such as RP (including X-linked RP), LCA, Stargardt disease and AM D. Identifying and testing treatments for future study in humans.

The Michael M. Wynn Research Center for the Study of Retinal Degeneration
Moran Eye Center, University of Utah, Salt Lake City, UT
Tufts University School of Medicine, Boston, MA
Wolfgang Baehr, Ph.D., Center Director
$232,563
Co-Investigators: Wolfgang Baehr, Ph.D., Paul Bernstein, M.D., Ph.D., Jeanne Frederick, Ph.D., Rajendra Kumar-Singh, Ph.D., Kang Zhang, M.D., Ph.D.
Evaluating gene and nutritional therapies for vision rescue. Identifying disease-causing genes in animal models of RP, AM D, LCA, Bardet-Biedl syndrome, Stargardt disease, Congenital Stationary Night Blindness, and other retinal degenerative diseases.

Oregon Health and Science University Research Center for the Study of Retinal Degenerative Diseases
Casey Eye Institute, Portland, OR
Richard G. Weleber, M.D., Center Director
$401,320
Co-Investigators: William E. Connor, M.D., Betsy Ferguson, Ph.D., Peter J. Francis, M.D., Ph.D., William Hauswirth, Ph.D., Brett G. Jeffrey, Ph.D., Raymond D. Lund, Ph.D., Martha Neuringer, Ph.D., Carmen M. Trzupek, C.G.C., Richard G. Weleber, M.D.
Evaluating cell-based, nutritional, and gene therapies in human and animal models of RP, LCA, AM D, Usher syndrome, and other diseases. Refining clinical diagnoses and correlating them with genetic variations.

Pre-Clinical Medical Therapy Evaluation Center
Cornell University
University of Pennsylvania
Ithaca, NY and Philadelphia, PA
Gustavo Aguirre, V.M.D., Ph.D., Center Director
$467,049
Co-Investigators: Gregory M. Acland, B.V.Sc., Gustavo Aguirre, V.M.D., Ph.D.
Identifying new disease-causing genes in canine models. Researching how variations in these genes cause retinal diseases such as RP, LCA, Stargardt disease and others. Perfecting gene and neuroprotective therapies for future use in human studies.
Research Center for Macular Degeneration and Allied Retinal Disorders
University of Iowa, Carver
College of Medicine, Iowa City, IA
Edwin M. Stone, M.D., Ph.D., Center Director
$418,595
Co-Investigators: Terry A. Braun, Ph.D.,
Thomas Casavant, Ph.D., Beverly D avidson,
Ph.D., James C. Folk, M.D., Robert F. M ullins,
Ph.D., Stephen R. Russell, M.D., Todd E.
Scheetz, Ph.D., Val Sheffield, M.D., Ph.D., Diane
Slusarski, Ph.D., Edwin M. Stone, M.D., Ph.D.
Correlating gene variations with clinical symptoms for a wide range of retinal diseases. Collecting this
information to more rapidly bring treatments to clinical trials.

Research Center for the Study of Retinal Degenerative Diseases at the Institute of Ophthalmology and Moorfields Eye Hospital
Institute of Ophthalmology, University College London, London, England, United Kingdom
Frederick W. Fitzke, Ph.D., Center Director
$333,871
Co-Investigators: Shomi Bhattacharya, Ph.D.,
Alan Bird, M.D., Frederick Fitzke, Ph.D.,
Graham E. Holder, Ph.D., David Hunt, Ph.D.,
Phil Luthert, Ph.D., Tony Moore, M.D.,
José-Alain Sahel, M.D., Andrew Webster, M.D.
Improving retinal imaging techniques for better clinical monitoring and management of disease progression. Identifying disease-causing genes and correlating variations with clinical symptoms in humans and animals with RP, AM D, LCA, Stargardt disease, and other diseases. Will lead to better treatment targets.

Scandinavian Center for the Studies on Hereditary Retinal Diseases
Wallenberg Retina Center, University Hospital of Lund, Lund, Sweden
Theo van Veen, Ph.D., Center Director
$231,942
Co-Investigators: Sten Andréasson, M.D., Ph.D.,
Theo van Veen, Ph.D.
Identifying genetic variations and clinical correlations in humans, and compiling this information into a database to support future clinical studies. Testing cell-based, neuroprotective and gene therapy treatments in animal models of various diseases.

Scheie Eye Institute Retinal Degeneration Research Center
University of Pennsylvania, Philadelphia, PA
Samuel G. Jacobson, M.D., Ph.D., Center Director
$339,972
Co-Investigators: Jean Bennett, M.D., Ph.D., Artur V.
Cideciyan, Ph.D., Samuel G. Jacobson, M.D., Ph.D.
Testing emerging therapies—cell-based, gene,
neuroprotective and nutritional therapies—in mice and dog models of RP, LCA, AM D, Stargardt disease, Usher syndrome, choroideremia and other diseases. Identifying therapies for potential study in humans.

Southwest Regional Research Center for the Study of Retinal Degenerative Diseases
Retina Foundation of the Southwest (Dallas)
The University of Oklahoma Health Sciences Center
The University of Texas Health Science Center at Houston
Dallas, TX, Oklahoma City, OK, and Houston, TX
Robert E. Anderson, M.D., Ph.D.,
David Birch, Ph.D., Center Co-Directors
$365,914
Co-Investigators: Robert Anderson, M.D., Ph.D.,
David Birch, Ph.D., Stephen P. Daiger, Ph.D.,
Albert O. Edwards, M.D., Ph.D., Muna N aash, Ph.D.,
Dianna K.H. Wheaton, M.S.
Identifying disease-causing genes, improving clinical
detection and diagnoses, testing nanotechnology delivery systems, and evaluating nutritional and
gene therapies in animals and humans for RP, AM D, LCA, Stargardt disease, Usher syndrome, and other conditions. Identifying therapies for potential study in clinical trials.

University of Illinois at Chicago Research Center for the Study of Retinal Degenerative Diseases
University of Illinois at Chicago Eye Center, Chicago, IL
Gerald A. Fishman, M.D., Center Director
$170,772
Correlating gene variations with clinical symptoms, developing better diagnostic methods, and improving technology for diagnosis and treatment of humans affected by all retinal degenerative diseases. Providing genetic and clinical information for future human studies.
INDIVIDUAL INVESTIGATOR AWARDS

CAREER DEVELOPMENT AWARD
Career Development Awards (CDAs) support talented and ambitious clinician-scientists who are entering the field of retinal disease research. Clinician-scientists are critical to the advancement of retinal research because they are uniquely qualified to conduct clinical trials, they provide critical patient care, and they are strongly committed to the development of innovative treatments and cures.

Isabelle Audo, M.D., Ph.D.
Laboratoire de Physiopathologie Cellulaire et Moléculaire de la Rétine, Inserm U592, Université Pierre et Marie Curie, Hôpital Saint-Antoine, Paris, France
Investigating Rod-derived Cone Viability Factor (RdCVF), a vision-preserving protein, for treatment of AMD.
$69,425

William A. Beltran, D.V.M.
School of Veterinary Medicine, University of Pennsylvania, Philadelphia, PA
Studying CNTF and BDNF—two vision-preserving factors—in canine models of retinal degeneration.
$69,495

Jacque L. Duncan, M.D.
UCSF Department of Ophthalmology, San Francisco, CA
Conducting clinical research for a wide range of retinal diseases.
$66,950

Peter Francis, M.D., Ph.D.
Oregon Health & Science University, Portland, OR
Investigating gene therapy for a variety of retinal diseases.
$66,921

Sandeep Grover, M.D.
University of Florida Shands Hospital, Jacksonville, FL
Utilizing various electrophysiological tests to better understand and diagnose retinal disease.
$66,950

J. Jill Hopkins, M.D.
Retina-Vitreous Associates, Los Angeles, CA
Providing clinical care and treatment for retinal diseases.
$136,806

RESEARCH FACILITIES

Joe G. Hollyfield, Ph.D.
Cole Eye Institute, Cleveland, OH
Collecting eye donor tissues for RP, AMD and other diseases. Archiving tissues for access by researchers to understand how disease progresses and find treatments and cures.
$90,000

Ian MacDonald, M.D.
University of Alberta, Edmonton, Alberta, Canada
Providing access to genetic testing for choroideremia. Building database of clinical data to better understand disease progression and potential treatments.
$23,340

Anand Swaroop, Ph.D.
W.K. Kellogg Eye Center, University of Michigan, Ann Arbor, MI
Characterizing clinical and genetic aspects of X-Linked RP and AMD. Developing resources for clinical trials of treatments.
$75,218

Wilmer Eye Institute Research Center for the Study of Retinal Degenerative Diseases
Johns Hopkins University School of Medicine, Baltimore, MD
Peter A. Campochiaro, M.D., Center Director
$385,279
Co-Investigators: Peter A. Campochiaro, M.D., David Valle, M.D., Donald J. Zack, M.D., Ph.D.
Studying gene variations causing RP, AMD, Stargardt disease, retinoschisis and other retinal degenerative diseases. Testing gene and neuroprotective therapies and other drugs in animal models and humans.
CELL-BASED THERAPY

David Gamm, M.D., Ph.D., University of Wisconsin-Madison, WI
Srinivas R. Sadda, M.D., Doheny Eye Institute, University of Southern California, Los Angeles, CA
Michael J. Young, Ph.D., The Schepens Eye Research Institute, Harvard Medical School, Boston, MA
Raymond Lund, Ph.D., Casey Eye Institute, Portland, OR

Comprised of researchers with strong expertise in stem cells, the Consortium is working to move promising stem cell therapies into clinical trials.

Judith A. Kapp, Ph.D., University of Alabama-Birmingham, Birmingham, AL
Optimizing the long-term survival of transplanted retinal tissue for people affected with AMD, RP, Usher syndrome, Stargardt disease, and other conditions.

Thomas A. Reh, Ph.D., University of Washington, Seattle, WA
Transforming human embryonic stem cells into retinal tissue for people affected by AMD, RP, Usher syndrome, Stargardt disease, and other conditions.

Srinivas R. Sadda, M.D., Doheny Eye Institute, University of Southern California, Los Angeles, CA
Optimizing integration of transplanted retinal tissue into the eyes of people affected with AMD, RP, Usher syndrome, Stargardt disease, and other conditions.

Michael J. Young, Ph.D., The Schepens Eye Research Institute, Harvard Medical School, Boston, MA
Investigating strategies for using stem cells in retinal transplantation including the development of biodegradable materials to facilitate integration.

Marco Zarbin, M.D., Ph.D., University of Medicine and Dentistry of New Jersey, New Jersey Medical School, Newark, NJ
Investigating human embryonic stem cell lines for retinal pigment epithelial cell transplantation therapies for RP, Stargardt disease, AMD, and Usher syndrome.

$101,780

CELLULAR AND MOLECULAR MECHANISMS OF DISEASE

Catherine Bowes-Rickman, Ph.D., Duke University Medical School, Durham, NC
Identifying how variations in the gene Complement Factor H lead to AMD. Will help identify targets for AMD treatments.

Anne L. Calof, Ph.D., University of California, Irvine, CA
Investigating how a factor called GDF-11 may be used to stimulate the retina to grow new cells and halt vision loss from AMD, RP, Usher syndrome, and Stargardt disease.

Shiming Chen, Ph.D., Washington University, St Louis, MO
Evaluating pharmacological treatments in mouse model (caused by variations in Crx gene). Will benefit people with LCA, cone-rod dystrophy, and RP.

Albert O. Edwards, M.D., Ph.D., Mayo Clinic, Rochester, MN
Evaluating different biomarkers, which can be used to predict a person’s risk for AMD.

Janis Lem, Ph.D., Tufts University-New England Medical Center, Boston, MA
Investigating how variations in the rhodopsin gene lead to photoreceptor death in certain forms of RP. Will provide targets for treatments.

Patsy Nishina, Ph.D., The Jackson Laboratory, Bar Harbor, ME
Identifying new mouse models to pinpoint and test treatment strategies for AMD.

$103,000

2007 Annual Report of the Foundation Fighting Blindness  23
Bjorn R. Olsen, Ph.D.
Harvard School of Dental Medicine, Boston, MA
Investigating the role of the protein called VEGF in the development of wet AMD. May provide new strategies for preventing wet AMD.
$103,000

Krzysztof Palczewski, Ph.D.
School of Medicine, Case Western Reserve University, Cleveland, OH
Investigating the role of the protein clarin-1, which when abnormally developed, leads to Usher syndrome 3A. Will provide targets for new treatments.
$230,265

Eric A. Pierce, M.D., Ph.D.
Scheie Eye Institute, University of Pennsylvania School of Medicine, Philadelphia, PA
Investigating mouse models of RP caused by variations in RP1 gene, and evaluating a drug for correcting the genetic transcription process that leads to vision loss.
$87,497

Paul Sternberg, M.D.
Vanderbilt University Medical Center, Nashville, TN
Researching the role of zinc in preventing the oxidative damage that leads to AMD.
$30,983

Hui Sun, Ph.D.
UCLA School of Medicine, Los Angeles, CA
Investigating how the gene CFH leads to the development of drusen and AMD. May lead to better ways to treat and prevent AMD.
$87,785

GENE THERAPY

Jean Bennett, M.D., Ph.D.
University of Pennsylvania, Philadelphia, PA
Researching gene delivery of Rod-Derived Cone Viability Factor, which shows great promise in preventing vision loss from RP, AMD, and other conditions.
$99,501

Peter A. Campochiaro, M.D.
Wilmer Eye Institute, Johns Hopkins University School of Medicine, Baltimore, MD
Investigating gene therapy in animal models of AMD.
$50,000

William Hauswirth, Ph.D.
University of Florida College of Medicine, Gainesville, FL
Developing gene therapy to preserve cone function in retinal diseases that affect cones including AMD and RP.
$25,438

Alfred S. Lewin, Ph.D.
University of Florida College of Medicine, Gainesville, FL
Developing gene therapy for treatment of autosomal dominant RP.
$99,666

Tiansen Li, Ph.D.
Massachusetts Eye and Ear Infirmary, Harvard University, Boston, MA
Exploring gene replacement therapy approaches in animal models of LCA, Usher 2A, and other forms of retinal degeneration.
$86,447

Miguel Seabra, M.D., Ph.D.
Imperial College of Science, London, England
Developing a gene replacement therapy for a mouse model of choroideremia.
$77,088

GENETICS

Stephen P. Daiger, Ph.D.
University of Texas Health Science Center at Houston, TX
Determining which recessive forms of RP and other related diseases are caused by a type of genetic variation known as a large deletion. Will help identify treatment targets.
$78,567

Anneke I. den Hollander, Ph.D.
Radboud University, Nijmegen Medical Centre, Nijmegen, The Netherlands
Utilizing a new technique called “ophthalmogenomics” to uncover disease-causing genetic variations in people with LCA and recessive forms of RP.
$76,813

Akihiro Ikeda, Ph.D.
University of Wisconsin-Madison, WI
Evaluating a mouse model of retinoschisis to better understand the mechanisms of vision loss in the disease. Will provide better targets for treatments.
$31,358
Josseline Kaplan, M.D., Ph.D.
INSERM U393 · Hôpital des Enfants Malades, Paris, France
Working with a mouse model of LCA (caused by variations in the gene GUCY2D) to better understand disease mechanisms. Will lay groundwork for future LCA clinical studies. $53,920

Bronya J.B. Keats, Ph.D.
Louisiana State University HSC, New Orleans, LA
Developing a mouse model of Usher 1C. The model exhibits both vision and hearing loss, making it a valuable tool for evaluating Usher 1C therapies. $100,000

William J. Kimberling, Ph.D.
Boys Town National Research Hospital, Omaha, NE
Building infrastructure for genetic and epidemiologic studies of Usher syndrome to improve diagnosis and facilitate future clinical trials. $42,368

Dror Sharon, Ph.D.
Hadassah-Hebrew University Medical Center, Jerusalem, Israel
Identifying new genes causing a variety of inherited retinal degenerations. $100,000

Edwin M. Stone, M.D., Ph.D.
University of Iowa Carver College of Medicine, Iowa City, IA
Providing genetic testing for retinal degenerative diseases at minimal costs to individuals. Using genetic information to identify potential therapies to slow and prevent disease. $1,000,000

NEUROPROTECTIVE THERAPY

William A. Beltran, D.V.M., Ph.D.
University of Pennsylvania, Philadelphia, PA
Optimizing the effect of ciliary neurotrophic factor (CNTF) for treating RP, AMD, and other conditions. $63,594

Jeffrey H. Boatright, Ph.D.
Emory University Eye Center, Emory University School of Medicine, Atlanta, GA
Researching the overall effects of a gall-bladder bile acid, TUDCA, in four different mouse models of retinal degeneration. $100,000

Michael E. Boulton, Ph.D.
University of Texas Medical Branch, Galveston, TX
Investigating use of nanomedicine to remove lipofuscin — toxic deposits linked to retinal conditions such as dry AMD, Stargardt disease, and Best disease. $96,299

Wei Cao, Ph.D.
University of Oklahoma Health Sciences Center, Oklahoma City, OK
Investigating neuroprotective agents and reduction of light exposure as therapies for Usher syndrome type 1 mouse model. $99,018

Rosalie K. Crouch, Ph.D.
Medical University of South Carolina, Charleston, SC
Developing a pharmacological agent to keep cones functional in patients with LCA involving RPE65 mutations. $77,182

Barbel Rohrer, Ph.D.
Medical University of South Carolina, Charleston, SC
Examining the therapeutic benefit of blocking the inflammatory pathway that leads to AMD. Providing a target for development of an AMD prevention. $100,000

Marius Ueffing, Ph.D.
Institute of Human Genetics, GSF-National Research Center, Neuherberg, Germany
Evaluating the vision-protecting qualities of proteins produced by Müller glial cells in the retina. Proteins may preserve vision in people with AMD, RP, and other conditions. $100,000

Donald J. Zack, M.D., Ph.D.
Wilmer Eye Institute, Johns Hopkins University School of Medicine, Baltimore, MD
Identifying new neuroprotective factors that may prevent photoreceptor degeneration and vision loss for AMD, RP, and other conditions. $100,000
NUTRITIONAL/ENVIRONMENTAL THERAPIES

Paul S. Bernstein, M.D., Ph.D.
Moran Eye Center, University of Utah, Salt Lake City, UT
Measuring macular pigment levels in human retinas to better understand the roles of lutein and zeaxanthin in reducing AMD risk.
$60,000

Johanna M. Seddon, M.D.
Harvard University School of Medicine, Boston, MA
Evaluating the interaction of genetics and nutrition in the risk of developing AMD.
$101,970

OTHER FFB FY07 GRANTS AND MEETING/CONFERENCE SUPPORT

Gregory M. Acland, B.V.Sc.
Cornell University, Ithaca, NY
Special equipment grant for the New Bolton Animal Facility.
$6,775

Robert E. Anderson, M.D., Ph.D.
University of Oklahoma Health Sciences Center, Oklahoma City, OK
International Retinal Degeneration Symposium, October 23 – 28, 2006 at San Carlos of Bariloche, Argentina.
$30,000

Joseph C. Besharse, Ph.D.
Medical College of Wisconsin, Milwaukee, WI
$5,000

William J. Kimberling, Ph.D.
Boys Town National Research Hospital, Omaha, NE
First International Symposium on Usher Syndrome and Related Disorders October 3 – 6, 2006 at Boys Town National Research Hospital.
$15,000

Patsy M. Nishina, Ph.D.
The Jackson Laboratory, Bar Harbor, ME
$3,000

FFB AWARDS

BOARD OF DIRECTORS’ RETINAL DEGENERATION RESEARCH AWARD
Presented to Dr. Anand Swaroop in recognition of his work leading to the identification of a mutation in the CEP 290 (NPH6) gene that is linked to more than 20 percent of LCA cases. The discovery may lead to treatments, including genetic therapies, for LCA and similar diseases.

Anand Swaroop, Ph.D.
W.K. Kellogg Eye Center, University of Michigan, Ann Arbor, MI
$25,000

LLURA LIGGETT GUND AWARD
This is the most prestigious honor awarded by FFB for lifetime achievement in retinal degenerative disease research. Dr. LaVail, who is only the fourth recipient in FFB’s history, is a world-recognized leader in describing the role of neuroprotective proteins in retina development, and in defining the models used worldwide today for retinal research. Since the early 1980s, his work has been giving researchers and companies clear targets for developing promising neuroprotective treatments.

Matthew M. LaVail, Ph.D., Beckman Vision Center, University of California at San Francisco, CA
$24,200
NATIONAL NEUROVISION RESEARCH INSTITUTE
FY07 GRANTS AWARDED

Clinical Assessment Centers

David G. Birch, Ph.D.
Retina Foundation of the Southwest, Dallas, TX
Conducting Phase II/III clinical trials of Encapsulated Cell Technology for delivery of vision-preserving protein CNF for R.P.
$24,125

Alessandro Iannaccone, M.D.
Hamilton Eye Institute, University of Tennessee, Memphis, TN
Conducting Phase II/III clinical trials of Encapsulated Cell Technology for delivery of vision-preserving protein CNF for R.P.
$25,000

Richard G. Weleber, M.D.
Oregon Health & Science University, Portland, OR
Conducting Phase II/III clinical trials of Encapsulated Cell Technology for delivery of vision-preserving protein CNF for R.P.
$240,143

Pre-Clinical Assessment Centers

Gustavo Aguirre, V.M.D., Ph.D.
School of Veterinary Medicine, University of Pennsylvania, Philadelphia, PA
Assessing a promising biopharmaceutical agent for saving vision in a canine model.
$317,016

Peter A. Campochiaro, M.D.
Wilmer Eye Institute, Johns Hopkins University School of Medicine, Baltimore, MD
Evaluating therapeutic agents in mouse models for treatment of AMD
$60,000

Theo van Veen, Ph.D.
Wallenberg Retina Center, University Hospital of Lund, Lund, Sweden
Screening numerous drugs and agents for potential use as treatments in retinal degenerative diseases.
$60,000

Rong Wen, M.D., Ph.D.
University of Pennsylvania, Philadelphia, PA
Investigating neurotrophic factors for preserving vision in retinal degeneration.
$60,000

NATIONAL NEUROVISION RESEARCH INSTITUTE
INDIVIDUAL GRANTS

Gene Therapy

Rando Allikmets, Ph.D.
Columbia University, New York, NY
Evaluating efficacy of gene delivery mechanisms in non-human primates. Will lead to better gene delivery and treatments in humans.
$50,000

Samuel Jacobson, M.D., Ph.D.
Scheie Eye Institute, Philadelphia, PA
Conducting clinical evaluations of Usher 1B in humans for future clinical study of gene therapy.
$134,060

David S. Williams, Ph.D.
University of California, San Diego School of Medicine, La Jolla, CA
Developing and refining Usher 1B gene therapy in animal models for future clinical study.
$259,844

Xian-Jie Yang, Ph.D.
Jules Stein Eye Institute, Los Angeles, CA
Developing and refining Usher 1B gene therapy in animal models for future clinical study.
$93,923

Neuroprotective Therapy

Raymond Iezzi, M.D.
Kresge Eye Institute, Wayne State University, Detroit, MI
$32,677

2007 Annual Report of the Foundation Fighting Blindness 27
Support our Steps

There are many ways that you can help the Foundation Fighting Blindness speed the pace of research. YOUR SUPPORT WILL MAKE A DIFFERENCE.

How You Can Help

The Foundation Fighting Blindness is a non-profit 501(c)(3) organization as determined by the Internal Revenue Service, and is the largest non-governmental supporter of retinal disease research in the world.
Outright Gifts
Outright gifts in the form of cash, securities, real estate, and personal property provide much-needed financial support and have an immediate impact.

Cash
Checks made out to the Foundation Fighting Blindness can be sent to P.O. Box 17279, Baltimore, MD 21203-7279. Or visit our website, www.FightBlindness.org to make an immediate and secure online donation.

Gifts of Real Estate and Financial Securities
When you give a gift of real property, stocks or bonds, you may claim an income tax charitable deduction based on the full market value of the gift, avoid capital gains taxes on appreciated value, and eliminate certain costs associated with the transfer of real property.

Personal Property
The Foundation accepts a wide variety of personal possessions, such as works of art, valuable collectibles, or antiques.

The Foundation Fighting Blindness is approved by the Office of Personnel Management for participation in the Combined Federal Campaign (#11721). Contributions to the Foundation are tax deductible to the full extent allowed by law.

Unrestricted Gifts
When you do not restrict the use of your gift, you give the Foundation flexibility to meet changing or urgent needs such as funding promising new research initiatives.

Volunteering
Besides your financial support, your individual talents and professional associations can be enormously useful to the Foundation. Whether you are interested in assuming a leadership role in your community or helping out at one of our many fundraising events around the country, your support is needed! Please call 800-683-5555, for more information.

Planned Giving
Planned giving is an important way for you to financially plan today to make a substantial gift to FFB, either now or in the future. Typical planned gifts include bequests, trusts, and gift annuities. To receive information about any of our planned giving programs, call 800-683-5555, ext. 1170.

Charitable Gift Annuity
The charitable gift annuity is one of the most secure forms of generating income for you, while making a gift to FFB. A charitable gift annuity is an agreement by an individual to give a sum of money or property to a charitable organization, and in return, receive a guaranteed fixed income for life. Unlike bequests, the gift annuity produces income to the donor throughout his or her lifetime.

Wills, Bequests and Trusts
You may also help FFB through a bequest in your will or living trust. You may designate FFB as a beneficiary of all or a portion of your estate. Also, you may donate a remainder of your estate after expenses and gifts to your family and friends, or designate a trust for use by a family member during his or her lifetime. You can include estate assets such as real estate, jewelry, valuable collectibles, art and antiques.

Tribute Gifts
Many FFB supporters use tribute gifts as a way of honoring an individual, commemorating a special occasion, or memorializing a friend or family member. FFB will notify the person or family being acknowledged without mention of the gift amount. Tribute gifts may be sent to the Foundation Fighting Blindness, P.O. Box 17279, Baltimore, MD 21203-7279 or made through our website www.FightBlindness.org.

Please include the name and address of those to be notified and the occasion or reason for the tribute.
A MESSAGE FROM OUR TREASURER

I am pleased to present the Foundation Fighting Blindness’ Statements of Financial Position and Activities. We are delighted that our Visions 2012 program (now in its second year) is right on target and that research funding has again increased, this year by more than 32% over the prior year, to $14.8 million—a record amount for FFB. This means that last year even more dollars went to fund critical research at prominent institutions throughout the world (see full list on pages 19 - 27).

Our Visions 2012 plan is our strategic plan to triple research funding and increase total revenue to $40 million by 2012.

In addition, $1.9 million was spent on public health education programs which help to inform, support and provide hope to those affected by retinal degenerative diseases—this represents a 30% increase over the previous year.

Net assets of the Foundation Fighting Blindness grew to $21,756,000 at the beginning of FY ’07 from a level of $8,711,000 at the beginning of FY ’05. This growth was due primarily to increased fundraising results and a $10 million grant from Gordon and Lulie Gund.

The board began spending down this increase in FY ’06 and FY ’07, by investing in field office expansion as a part of the Visions 2012 Plan, and by increasing Research and Public Health Education expenditures to $16,778,000 from the prior year level of $12,711,000.

I am excited about the continued growth and strength of our organization. With 50 volunteer-led chapters now in existence, we have engaged thousands of new people who are committed to raising critical dollars for research and creating awareness for our important mission.

Our financial statements were audited by Raffa, P.C. independent certified public accountants. A complete copy of our audited financial statements is available upon request from the Foundation Fighting Blindness, 11435 Cronhill Drive, Owings Mills, M.D., 21117 or on our website at www.FightBlindness.org.

Sincerely,

William J. Chatlos
Treasurer
### Statement of Activities

#### REVENUE AND SUPPORT

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contributions</td>
<td>$10,719,000</td>
</tr>
<tr>
<td>Special events, net of direct</td>
<td>$6,773,000</td>
</tr>
<tr>
<td>Bequests</td>
<td>$2,523,000</td>
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<tr>
<td>Other revenue</td>
<td>$1,301,000</td>
</tr>
<tr>
<td><strong>Total Revenue</strong></td>
<td><strong>$21,316,000</strong></td>
</tr>
</tbody>
</table>

#### EXPENSES

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research</td>
<td>$14,839,000</td>
</tr>
<tr>
<td>Public Health Information</td>
<td>$1,939,000</td>
</tr>
<tr>
<td>Management</td>
<td>$1,696,000</td>
</tr>
<tr>
<td>Fundraising</td>
<td>$6,805,000</td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td><strong>$25,279,000</strong></td>
</tr>
</tbody>
</table>

Change in unrestricted net assets: $(937,000)
Change in restricted net assets: $(2,990,000)

**Total change in net assets**: $\text{\$(3,963,000)\}$

### Statement of Financial Position

#### ASSETS

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and investments</td>
<td>$11,882,000</td>
</tr>
<tr>
<td>Pledges receivable, net</td>
<td>$6,768,000</td>
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<tr>
<td>Other assets</td>
<td>$586,000</td>
</tr>
<tr>
<td>Trusts and other funds</td>
<td>$4,877,000</td>
</tr>
<tr>
<td>Fixed assets, net</td>
<td>$1,458,000</td>
</tr>
<tr>
<td><strong>Total Assets</strong></td>
<td><strong>$25,571,000</strong></td>
</tr>
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</table>

#### LIABILITIES

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts payable and accrued liabilities</td>
<td>$911,000</td>
</tr>
<tr>
<td>Research grants payable</td>
<td>$5,350,000</td>
</tr>
<tr>
<td>Deferred revenues</td>
<td>$198,000</td>
</tr>
<tr>
<td>Liabilities under trusts and other funds</td>
<td>$1,319,000</td>
</tr>
<tr>
<td><strong>Total liabilities</strong></td>
<td><strong>$7,778,000</strong></td>
</tr>
</tbody>
</table>

#### NET ASSETS

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unrestricted net assets</td>
<td>$2,817,000</td>
</tr>
<tr>
<td>Board designated net assets</td>
<td>$4,420,000</td>
</tr>
<tr>
<td>Temporarily restricted net assets</td>
<td>$10,056,000</td>
</tr>
<tr>
<td>Permanently restricted net assets</td>
<td>$500,000</td>
</tr>
<tr>
<td><strong>Total net assets</strong></td>
<td><strong>$17,793,000</strong></td>
</tr>
</tbody>
</table>

**Total liabilities and net assets**: $25,571,000
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Anita Rodriguez-Lambert
Stephanie Wells-Walper
310-207-2089
The mission of the Foundation Fighting Blindness is advanced locally through the work of volunteer-led chapters around the country.

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  - Bill Hasan, President

**Western Region**
- Las Vegas Chapter (Organizing)
  - Lee Weiss, President

To contact a specific chapter, please call the appropriate Regional Development Office listed on the preceding page.