

*The Catalyst  
in Vision  
Science*



Research to  
Prevent  
Blindness

[www.rpbusa.org](http://www.rpbusa.org)

Our goals at Research to Prevent Blindness (RPB) are to insure that every human being receives, retains or regains the gift of sight. We are the leading nonprofit organization supporting research into every means of preventing blindness and restoring lost vision, no matter what the underlying cause.

RPB pursues these goals by providing research grants to the most promising scientists working within departments of ophthalmology at the leading U.S. medical schools. Our Grants Program is designed to build and sustain a nationwide community of vision researchers, and to attract prominent scientists from other disciplines who bring new perspectives and expertise into the field of eye research.

RPB scientists are committed to transforming the lives of those with vision loss. We are committed to those scientists.



New imaging methods suggest that amblyopia—found in 2-3% of the population—also affects brain functions such as attention and speeded decision making.

## Why research?

The world's population is growing and aging, increasing the prevalence of eye diseases. The fastest growing segment of the American population – those over 80 – has the highest rate of blindness, but more and more younger people will lose their sight in the coming years. By 2020, the estimated number of people aged 40 or older with cataracts is expected to exceed 30 million, and the number of people with the most common form of glaucoma will grow to 3.6 million. By 2050, cases of early age-related macular degeneration may reach 17.8 million, and diabetic retinopathy will affect 9.9 million people aged 65 years or older. Blinded or visually impaired veterans are also joining the growing numbers of people confronting the life-changing impact of vision loss. The strain on the medical system and care givers will be enormous and the loss of productivity will burden the economy.

Only by accelerating research can we uncover the causes of sight-stealing conditions and have treatments available for people sooner rather than later.



RPB support is advancing techniques to improve early detection of ocular cancers, to predict their spread, and to evaluate the most promising treatments.

# A History of Innovation

Innovation is and always has been at the heart of RPB's activities. Our first innovation was to place unrestricted funds in the hands of a department of ophthalmology chair to insure the continuity of ongoing investigations, equip labs and pursue original ideas... and many more have followed. The entire landscape of U.S. eye research shifted when RPB made grants available only to departments of ophthalmology, of which there were few at the time. This caused medical schools across the country to form separate departments focused solely on eye research.

In the 1960s, RPB led the initiative to create the National Eye Institute, which, today, distributes government support for eye research in excess of \$700 million each year.

To expand the nation's capacity for eye research, RPB helped to raise capital for seven regional eye labs, all of which remain leading research institutes. RPB continues to adjust its Grants Program in response to emerging needs. Recently, we created the Innovative Ophthalmic Research Award to encourage innovation and collaboration between departments of ophthalmology and other sciences.

## RPB's Mission

Research to Prevent Blindness (RPB) is committed to stimulate, sustain and intensify a concerted research assault, with the goal of developing preventives, cures and effective treatments for all diseases of the visual system that damage and destroy sight. RPB mobilizes financial resources in support of eye research making available essential laboratory space, scientific personnel and advanced technological equipment in its mission to preserve vision and restore sight.

# RPB and Eye Health

Today, when a patient goes to an eye care specialist for an exam or treatment, RPB's research dollars are almost invariably connected to the tools and knowledge applied to a detected condition – whatever that condition may be.

This is the result of a decades-long, strategic initiative to combat blindness. Since it was founded, in 1960, RPB has channeled hundreds of millions of dollars to investigators who have transformed the world's body of knowledge about the causes and mechanisms of eye diseases... and developed ways to treat them.

Every year, RPB investigators publish approximately 1,000 studies in prominent scientific journals, and submit progress reports on hundreds of soon-to-be-unveiled breakthroughs.

RPB researchers have: refined the laser for eye surgeries; identified compounds now used to treat wet age-related macular degeneration; improved intraocular lenses for cataract surgery; generated light sensing retina cells from a patient's skin; used gene therapy to restore sight in patients with retinal degeneration; demonstrated that color blindness is curable; and advanced devices that provide artificial sight. With RPB support, enhanced-imaging tools are allowing scientists to understand the workings of the visual system as never before. The relationships between inherited risk, environmental factors and lifestyle choices are coming into focus.



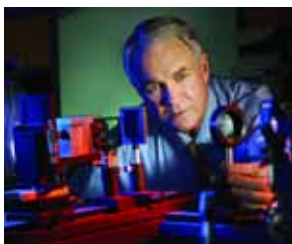
# The RPB Grants Program

RPB's emphasis is on high-potential investigators. There is an RPB grant category available to a scientist at any stage in his or her career--from a medical student considering academic eye research to a seasoned investigator extending the frontiers of vision science.

Grant applications are reviewed by two committees: a standing Scientific Advisory Panel composed of distinguished leaders in medical science; and a rotating panel of chairs of departments of ophthalmology. Grants are awarded not only on the merits of the proposed project, but on the demonstrated independence of a researcher and the vibrancy of the environment within which the proposed work will be conducted.

At many research institutions, RPB's support creates a multiplier effect. Unrestricted grants are used to acquire larger government grants. At the same time, the flexibility of RPB support allows government-supported investigators to pursue additional research. The successes generated by these scenarios can attract donors to support university research and capital projects, further expanding capacity across the vision research community.

Some RPB-supported studies affect societal issues, such as the adequacy of eye care in nursing homes, or factors that influence an individual's decision to stop driving. Still other advances have implications for the treatment of illnesses beyond those of vision.



# Investing In Eye Research

The strength of RPB's financial position allows the organization to apply contributions, in their entirety, toward eye research. Contributors to RPB understand that our resources are applied to research programs and scientists demonstrating the strongest potential to conduct investigations with maximum effect. RPB makes every attempt to realize benefactors' requests to stimulate disease-specific studies.

A matching fund, created by RPB's founder, doubles the value of gifts to RPB up to a total of one million dollars within a calendar year.

RPB is a tax-exempt public charitable organization under Section 501(c)(3) of the Internal Revenue Code. Gifts of cash and property to RPB are deductible for income tax purposes. Anyone wishing information concerning current research findings may contact RPB. To obtain a full description of RPB's programs, its audited financial statements and a listing of the volunteers who serve on its Board of Trustees and Scientific Advisory Committees, please ask for RPB's Annual Report or visit [www.rpbusa.org](http://www.rpbusa.org).



*“The deepest gratitude will never be expressed—nor can it be. It will be found in the eyes of those who live after us, who drink in the visual beauties of life without fearing the loss of that vision, and who may say to themselves in momentary acknowledgement of this magnificent gift, ‘It is wonderful to see!’ ”*

—Jules Stein, MD

Founder, Research to Prevent Blindness



## Research to Prevent Blindness

645 Madison Avenue, New York, NY, 10022-1010

Tel.: 212-752-4333 or 800-621-0026

Fax: 212-688-6231

E-mail: [inforequest@rpbusa.org](mailto:inforequest@rpbusa.org)

[www.rpbusa.org](http://www.rpbusa.org)