



Research to
Prevent Blindness

Preserving and Restoring Vision Through **Research**



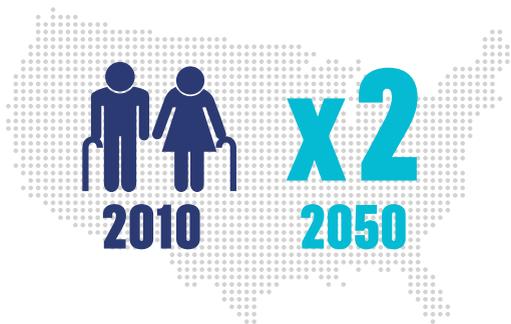
WHY RPB?

Blindness and visual impairment can affect people of any age or background.



There are congenital, age-related and injury-related causes of vision loss.

However, several factors are currently leading to a significant increase in the number of Americans experiencing vision loss:



The older adult population in the U.S. is growing; it is projected to double from 2010 to 2050



The diversity of the American population is increasing

Both older adults and people from certain ethnic backgrounds are at higher risk for blindness and visual impairment due to conditions like age-related macular degeneration (AMD), diabetic retinopathy, glaucoma, cataracts and low vision.

At the same time, we know that Americans fear losing eyesight more than any other sense.

Today, the mission of Research to Prevent Blindness (RPB) is more important than ever:

To preserve and restore vision by supporting research to develop treatments, preventives and cures for all conditions that damage and destroy sight.

OUR MODEL

RPB is one of the few sources of unrestricted funding for academic medical institutions and researchers studying the causes of and treatments for vision loss, across all sight-threatening conditions.

RPB: The Early Years



1959: Dr. Jules Stein, an ophthalmologist-turned entertainment magnate, visits Lighthouse for the Blind and wonders what can be done to prevent blindness.



1960: Dr. Stein uses money he earned from founding and running Music Corporation of America to endow, with cofounder Robert E. McCormick, Research to Prevent Blindness, a foundation and public charity aimed at finding scientific cures to blindness.

Our founder, Dr. Jules Stein, believed in the power of excellent science to transform the world. When he founded RPB, he applied this philosophy to his passion: saving and improving “the magnificent gift of sight.”

We fund research through two types of grants that enable RPB to support high-impact research that may not get funded by other sources:



Institutional: We identify excellent, productive departments of ophthalmology where cutting-edge research is taking place that is helping to advance vision science. We provide unrestricted grants of \$75,000 - \$115,000 a year to more than 30 ophthalmology departments around the country.

Department Chairs are able to deploy the funds flexibly: using them to support research aimed at emerging threats to vision, to support established researchers and their work during gaps in government funding, and to support early-stage or high-risk research that has great potential, but little or no funding from the federal or corporate sectors.



Individual: We award researcher-specific grants in a variety of categories every year, including those designed to support: early-career researchers, international collaboration, innovation, and specific eye diseases such as age-related macular degeneration, amblyopia and low vision. Our grantees, many of whom develop into leaders in vision research, add critical evidence-based knowledge to the study of eye and vision-related diseases.

HOW ARE RPB GRANTEES CHOSEN?

1. Rigorous application process, which requires detailed information on past and proposed research, record of excellence, leadership support, laboratory space and more;
2. Review and selection by two expert committees, including RPB's Scientific Advisory Panel of renowned scientists; and
3. Approval by the RPB Board of Trustees.

** Once grants are awarded, RPB requires multi-year research projects to undergo expert scientific review during the award period to ensure that research aims are being met.*

1962: Twenty-two medical research institutions receive RPB unrestricted grant support.



1966: RPB aids in the formation of the Association of University Professors of Ophthalmology to advance ophthalmic science in the nation's medical schools.



1968: An eight-year campaign led by Dr. Stein and RPB President David Weeks helps to establish The National Eye Institute as a separate entity within the National Institutes of Health.

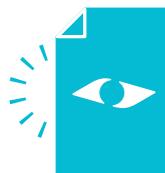
IMPACT

Throughout its history, RPB funding has been tied to nearly every major vision research breakthrough.

FROM GRANTS TO DISCOVERIES



**\$373
MILLION+**
in research grants
awarded by RPB
since its founding



**\$10
MILLION+**
awarded
annually



1,000+
new scientific
studies cite
RPB support
annually

We further leverage our funding by engaging in strategic partnerships with other well-respected nonprofits, foundations and associations that align with our mission.

RPB FUNDS HAVE BEEN USED TO:

Expedite the use of a laser to repair torn retinas **(1962)**

Develop the fundus camera, enabling color photos in the back of a patient's eye during examination **(1970)**

Identify a human cancer gene that protects against retinoblastoma, a blinding and often fatal childhood eye tumor **(1986)**

Freeze abnormal blood vessels in the first successful therapy for retinopathy of prematurity **(1987)**

Develop a new drug to lower eye pressure in glaucoma patients **(1996)**

Find that a single-dose antibiotic treats trachoma, the leading infectious cause of blindness worldwide **(1996)**

Create the treatment known as photodynamic therapy to stabilize the vision of certain patients with wet age-related macular degeneration **(1999)**

Develop a gene therapy for the inherited blind-deaf disease Usher1B, a major type of retinitis pigmentosa **(2005)**

Stop a world-wide epidemic of a rare, aggressive fungal corneal infection among people using a specific contact lens solution **(2006)**

Discover that glaucoma likely originates in the brain, opening the door for groundbreaking neuroprotective therapies **(2009)**

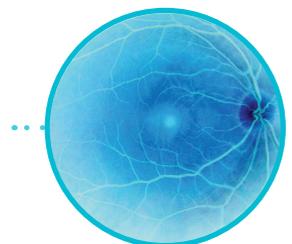
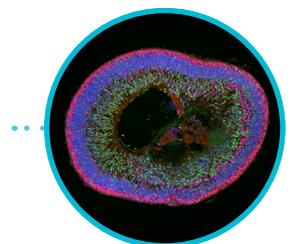
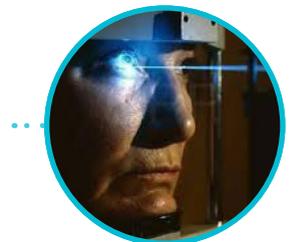
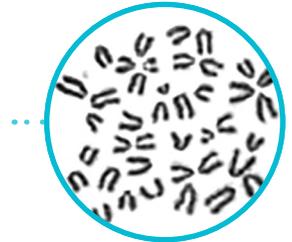
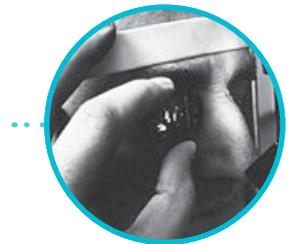
Develop "retinas in a dish," derived from patient skin and blood cells, which can be used to test patient-specific treatments for retinal diseases **(2014)**

Successfully treat an Ebola first responder who contracted the disease in his eye; the treatment protocol was later rolled out to thousands of people in Africa **(2015)**

Identify a natural compound—NMN—that reduces key signs of aging, including eye dryness **(2016)**

Discover the loss of blood vessels in the retina could signal Alzheimer's disease **(2018)**

Reprogram cells from an adult with Type 1 diabetes to replace and repair damaged blood vessels in the retina **(2020)**



And that's just a small sampling!

Giving to RPB

All too often, healthy vision is taken for granted—until it's gone.



Over the years, generous donations by forward-thinking supporters have played a critical role in helping RPB realize the vision of its founder, Dr. Jules Stein, to provide “the magnificent gift of sight.” Sixty years later, we are laser-focused on that same mandate.

- Donations support research into the structure of the eye, the causes of eye disease, advanced diagnostics and transformational treatments.
- Every dollar you give goes directly to research and is matched by RPB (up to \$1 million a year in total).
- RPB maintains a lean staff and low administrative costs, to maximize money available for grant-making.



Your support enables us to continue funding research that leads to the preservation and restoration of vision. To make a donation, visit us at www.rpbusa.org or call (800) 621-0026.



Research to Prevent Blindness

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