



Research to Prevent Blindness

Annual Report 2022



**Bedrock for
Breakthroughs**



Research to Prevent Blindness

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ON THE FRONT COVER: (top) Tingting Yang, PhD, (right) of the Columbia University Irving Medical Center, received an RPB Career Advancement Award in 2022. See page 9. Here, she reviews a sample with her colleagues. (bottom) Neel Pasricha, MD, of the University of California, San Francisco, School of Medicine, received an RPB Career Development Award in 2022. See page 8.

ON THE BACK COVER: (top) Cintia de Paiva, MD, PhD, (right) of Baylor College of Medicine, and her colleague Laura Schaefer, PhD, examine samples on glass slides. Dr. de Paiva received an RPB Stein Innovation Award in 2022. See page 10.

(bottom) Michael Telias, PhD, of the University of Rochester School of Medicine & Dentistry received an RPB Career Development Award in 2022. See page 8.

Bedrock for Breakthroughs

Dear Friends of Research to Prevent Blindness,

Thank you for your support over the past year! As a nonprofit, we are in the business of creating breakthroughs in the diagnosis and treatment of eye diseases for the benefit of all. But the path to a breakthrough is not linear. Instead, it requires a strong foundation of knowledge that can be built upon, layer by layer. We do this by identifying brilliant, compassionate and committed scientists and then giving them the resources they need to make the next advance.

When we prioritize scientific excellence (the purview of our esteemed review committees, page 17), and we commit to doing this year after year, incredible breakthroughs happen!

This is why we never waver in our commitment to you. You can rely on RPB to advance its mission. From the creation of lasers to repair torn retinas; to the development of safe and effective cataract surgery; to the creation of intra-ocular pressure lowering drugs for glaucoma, anti-VEGF drugs for the treatment of wet age-related macular degeneration, and gene therapy for inherited retinal disease, RPB has been there, making breakthroughs possible.

We've made huge progress, but there are still many questions to be answered and treatments to be developed. That is why we work so hard to identify and support the specific scientists doing the precise research that will make the critical advances that add up to a breakthrough. It's the only way that we can turn a sight-threatening disease into a treatable one. With more than 2,000 new scientific publications citing RPB funding in 2022 (see page 2), we're well on our way!

Another important way that we support breakthroughs is by supporting the careers of innovative scientists. It's simple: when scientists have the resources they need, they do their best work. See page 6 for a few examples.

Thank you for building solutions with us. Thank you for supporting tomorrow's breakthroughs, today.

With hope,



Diane S. Swift
Diane S. Swift
Chairman



Brian F. Hofland
Brian F. Hofland, PhD
President

Building A Clearer Tomorrow

At Research to Prevent Blindness, our grants program is the foundation of our work. We support the *brightest researchers*, in *highly effective labs*, asking the *most important questions*. The new knowledge that our grantees enable is built upon, year after year, discovery by discovery.



In 2022, RPB:
provided more than

\$11 million

in grants to researchers and
departments of ophthalmology.



As a result, RPB was cited
as a funder in

2,000+

new scientific publications
in peer-reviewed
scientific journals.



It's clear:

**excellent
science**

is the foundation upon
which discoveries and
developments are built.



RPB works tirelessly to fulfill our mission to develop “treatments, preventives and cures” to preserve and restore vision for all. How do we do this? We use a unique, two-pronged grantmaking model that allows us to be both directive (allocating funding to the areas of highest need) and flexible (responding to timely scientific opportunities).

1

Individual Grants

RPB offers a variety of individual grants that allow scientists to pursue specific, cutting-edge research proposals. Grant applications are rigorously assessed by RPB’s esteemed grant review committees to ensure that all funded projects are grounded in excellent science and that the research will move the field of vision science forward. RPB’s individual grants are highly competitive.

See pages 7–13 for our 2022 individual grantees.

2

Departmental Grants

RPB provides exceptional departments of ophthalmology with \$75,000 – \$115,000 a year in unrestricted funding. As one of the few sources of unrestricted funds—which can be used for pilot studies, starting new lines of research, the purchase of a piece of high-tech research equipment—RPB grants provide the flexibility that enable innovative scientific approaches to eye diseases.

See page 16 for a list of the departments we funded in 2022.

Across its grant program, RPB funds research projects that uncover critical knowledge about the function of key structures in the eye, down to the cellular and molecular level. These discoveries are critical to understanding **why** disease occurs and **how** to treat it!

In 2022, RPB-supported researchers conducted critical research that led to advancements in AMD, glaucoma, diabetic retinopathy, retinal diseases, strabismus/amblyopia, corneal diseases, low vision, dry eye, uveitis/infectious diseases, myopia and many more conditions.

Wherever eye disease exists, RPB is there, catalyzing discoveries that lead to treatments. RPB will never waver in its commitment to enable everyone to see the future clearly.

In The Lab With RPB Grantees

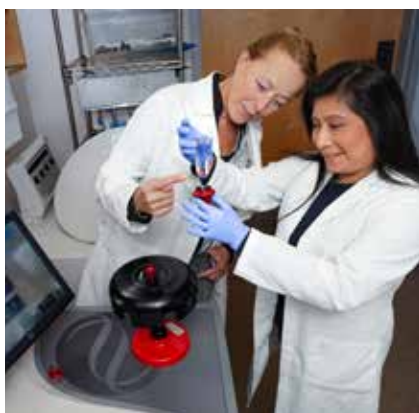
RPB Unrestricted Grants, Challenge Grants and a wide variety of individual grants are supporting the work of these dedicated vision researchers.



Dr. Gregory W. Schwartz of Northwestern University Feinberg School of Medicine is at the lab's fluorescence microscope. He works to uncover new information about the brain's role in **visual processing**.



Dr. Daniel Pelaez (left) of the University of Miami Miller School of Medicine supervises his PhD student Acadia Moeyersoms during the extraction of nucleic acids from tear samples collected in Dr. Carol Karp's clinic. The lab focuses on the development of treatments for **pre-malignant and cancerous ocular tumors**.



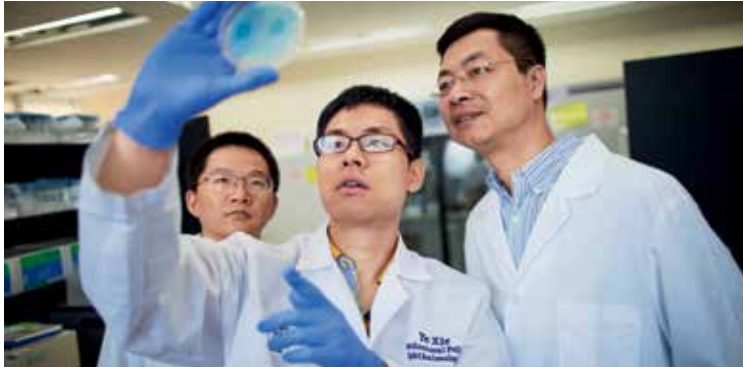
At Duke University School of Medicine, researchers Belinda Hernandez, PhD student (right), and Dr. Catherine Bowes Rickman conduct research related to **age-related macular degeneration**. Here, they use a centrifuge tube to isolate extremely small vesicles (exosomes) from retinal pigment epithelium cells.



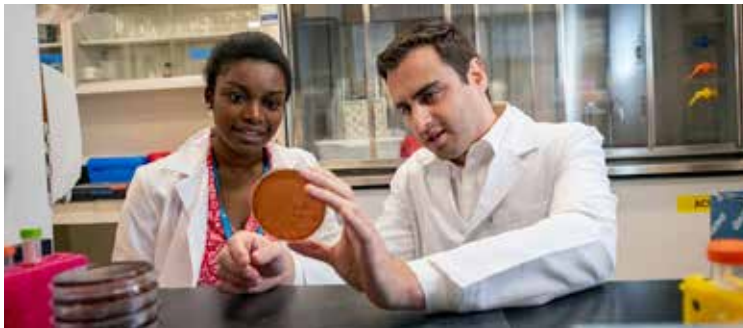
Dr. Audrey M. Bernstein of SUNY Upstate Medical University is testing the enzyme activity of an anti-scarring target with inhibitory compounds in her lab's quest to prevent **scarring of critical eye tissue** after surgery or injury.



Dr. Stacy Pineles (left) and Dr. Federico Velez of the David Geffen School of Medicine at the University of California, Los Angeles are pediatric ophthalmologists developing a novel hydrogel material to be used as a substitute for extraocular muscle for paralytic **strabismus**.



Dr. Bo Chen (right) and colleagues at the Icahn School of Medicine at Mount Sinai check vector construction for gene transfer on a culture plate. Dr. Chen's lab studies retinal degenerative diseases, such as **age-related macular degeneration, retinitis pigmentosa and glaucoma**.



Dr. Paulo Bispo (right) of Harvard Medical School/MEEI, here with medical student Jadesola Oremosu, is a medical microbiologist dedicated to developing better ways to diagnose, treat and prevent infections, including **antibiotic-resistant eye infections**. He uses state-of-the-art approaches to develop rapid and sensitive diagnostic tests.



Dr. Yoshikazu Imanishi (left) and lab member Rina Pokharel of Indiana University School of Medicine are preparing samples for confocal microscopy. The Imanishi lab is developing therapies for photoreceptor degenerative disorders, such as **retinitis pigmentosa and Usher syndrome**.

RPB grantees were not only busy in the lab—some also participated in outreach events designed to educate the patient community about eye diseases via our “Lunch & Learn” events— one-hour, free virtual sessions featuring expert researchers.

Our 2022 events focused on geographic atrophy / dry age-related macular degeneration (AMD) and retinitis pigmentosa. We thank the following RPB grantees for serving as speakers for these events:

- **Eleonora Lad, MD, PhD**, Duke University School of Medicine
- **SriniVas R. Sadda, MD, FARVO**, University of California, Los Angeles, David Geffen School of Medicine
- **Jacque Duncan, MD**, University of California, San Francisco, School of Medicine
- **Krzysztof Palczewski, PhD**, University of California, Irvine, School of Medicine
- **Jayakrishna Ambati, MD**, University of Virginia School of Medicine
- **Catherine Bowes Rickman, PhD**, Duke University School of Medicine

Thank you to Apellis Pharmaceuticals for sponsoring two events on geographic atrophy / dry AMD and to Janssen Pharmaceutical Companies of Johnson & Johnson for sponsoring an event on retinitis pigmentosa.

To view all RPB Lunch & Learn events, visit our YouTube channel: <https://bit.ly/RPBYouTube>.

Where Are They Now?

RPB grants not only serve as the bedrock for scientific breakthroughs, they also serve as the foundation for career success! An RPB grant can enable a researcher to start a new line of research, launch their own lab, compete for large-scale government research grants and gain recognition in their field.

In many cases, an RPB grant is the first significant grant a researcher receives, enabling them to kick-start a thriving research career. Here are just a few examples of the hundreds of vision science careers launched and sustained by RPB awards.



Bryan William Jones, PhD

Awards: RPB Career Development Award (2006),
RPB International Research Collaborators Award (2019)

Dr. Jones studies cellular neuroscience and the neurobiology of disease at the Moran Eye Center at the University of Utah Health Sciences Center. As Associate Professor of Ophthalmology & Visual Sciences, he and his research team created their first retinal connectomes in 2009 and have continued their work, completing the first pathoconnectomes, which show how eye disease alters retinal circuitry, in 2020. This pioneering work, which has provided the first and highest resolution large-scale retinal connectomes in the world, is providing tremendous amounts of data for research into the normal circuitry of the retina and discovering how inherited retinal diseases and other neurodegenerative diseases change neural circuitry.



Terri L. Young, MD, MBA

Awards: RPB Career Development Award (1996), RPB Physician-Scientist Award (2003),
RPB Lew R. Wasserman Award (2008)

Dr. Young is the Chairwoman of the University of Wisconsin-Madison (UW) Department of Ophthalmology and Visual Sciences. She is the Peter A. Duehr Chair of Ophthalmology and Visual Sciences, and also serves as a Professor of Pediatrics and Medical Genetics at UW. Dr. Young's research team was the first to systematically develop and explore strategies to uncover genes/proteins causative for high-grade myopia (nearsightedness) which has associated morbidities of glaucoma and retinal detachments. She has established novel ophthalmic genetics programs and systems, and her team has discovered multiple gene mutations for refractive errors, inherited retinal and corneal disorders, syndromic disorders and childhood glaucoma.



Stephen H. Tsang, MD, PhD

Awards: RPB Medical Student Eye Research Fellowship (1996),
RPB Physician-Scientist Award (2013)

Dr. Tsang is an esteemed clinical geneticist at Columbia University Irving Medical Center where he designs and tests genome engineering strategies for retinal and other eye diseases as the Laszlo T. Bito Professor of Ophthalmology, and Pathology and Cell Biology. Dr. Tsang now serves on the RPB Scientific Advisory Panel, which brings him full circle from his first research experience in ophthalmology as a medical student with an RPB fellowship. He also serves as a mentor to current RPB medical student fellows.



Paula Anne Newman-Casey, MD, MS

Awards: RPB Career Development Award (2016), RPB Physician-Scientist Award (2021)

Dr. Newman-Casey is a clinician-researcher focused on understanding how we can leverage technology to extend the healthcare system's reach first by engaging people in eye disease screening and then by helping support their chronic eye disease self-management. She is an Associate Professor and Associate Chair for Research in the Department of Ophthalmology & Visual Sciences at the University of Michigan School of Medicine. She also directs the eye center's outreach initiative to provide free ophthalmic care for all patients referred through a local free clinic.

New Grants

Each year, RPB makes grants to researchers who are studying a wide variety of sight-threatening diseases. We're pleased to present the 2022 RPB individual award recipients on the following pages.

These talented scientists were selected by RPB's esteemed review panels (see page 17) after careful assessment and deliberation. They were chosen for their field-changing research proposals and commitment to scientific excellence.

We are proud to support these researchers today, as they pursue the sight-saving breakthroughs of tomorrow.

Shreya Sirivolu (right) with mentor Jesse L. Berry, MD



Lev Prasov, MD, PhD



RPB Career Development Awards

This award provides \$350,000 over 4 years to early-career MDs, PhDs and MD/PhDs to support their investigations, with mentorship from senior scientists. Their primary appointments must be in ophthalmology, and they must show potential to lead independent research.

Kun-Che Chang, PhD

University of Pittsburgh School of Medicine

Studying retinal ganglion cell (RGC) and optic nerve degeneration—factors that result in permanent loss of vision in patients with glaucoma and other optic neuropathies—in order to identify the factors involved in RGC development.

Thomas Dohlman, MD

Harvard Medical School / MEEI

Investigating how the immune system in children rejects corneal transplants, an area of fundamental importance that has not been explored before.

Robert A. Hyde, MD, PhD

University of Illinois at Chicago College of Medicine

Studying retinitis pigmentosa (RP)—one of the most common, and blinding, inherited retinal degenerations—to examine how the cells that transmit visual information to the brain, which are in close proximity to the RP-affected light-sensitive cells, change as the disease progresses.

Wendy Liu, MD, PhD

Board of Trustees of the Leland Stanford Junior University

Exploring the role of specific genes in sensing intraocular pressure (a known risk factor for glaucoma) and mediating retinal ganglion cells, the cells that are lost during the course of glaucoma.

Neel Pasricha, MD

University of California, San Francisco, School of Medicine

Advancing novel therapeutics for dry eye disease—a common and sometimes painful disease of the ocular surface—by promoting tear fluid secretion by targeting ion transport proteins on epithelial cells lining the ocular surface.

Lev Prasov, MD, PhD

The Regents of the University of Michigan School of Medicine

Studying a specific gene, identified by studying a rare genetic disorder, that leads to glaucoma (as well as skin, blood vessel and joint disease) when the gene is altered.

Michael Telias, PhD

University of Rochester School of Medicine & Dentistry

Investigating a long-lasting treatment for the preservation of residual vision in patients suffering from retinal degeneration based on blocking a specific target receptor for inner retinal neurons.

Victoria L. Tseng, MD, PhD

The Regents of the University of California, Los Angeles

Testing the hypothesis that the occurrence and outcomes of neovascular glaucoma—a devastating and potentially blinding condition—are closely linked to an individual's social, economic and demographic background.

RPB Career Advancement Awards

This award supports early- to mid-career researchers with a grant of \$150,000 as they seek new knowledge related to eye diseases. The award is aimed at vision researchers who have already received their first independent federal grant—the National Institutes of Health R01—and are collecting new data to apply for a second R01.

Mrinalini Hoon, PhD

University of Wisconsin-Madison School of Medicine & Public Health

Studying the molecular interactions that underlie visual function in the retina using the well-characterized dim-light pathway in the mouse retina.

David Myung, MD, PhD

Board of Trustees of the Leland Stanford Junior University

Developing a new way to deliver healthy endothelial cells to patients with corneal cell loss through an innovative technology known as bio-inkjet printing.

Tingting Yang, PhD

Columbia University Irving Medical Center

Studying two specific proteins that have critical roles in the eye (generating a vision-related electrical signal and determining intraocular pressure) in order to learn how these proteins regulate cells in a physiological context.

RPB Physician-Scientist Awards

This 3-year, \$300,000 award strengthens and promotes clinical and/or basic research conducted by MDs or MD/PhDs who are actively engaged in clinical research. Physician-scientists bring a unique perspective and commitment to patient care to their research activities, enhancing the vision science field.

Anthony Kuo, MD

Duke University School of Medicine

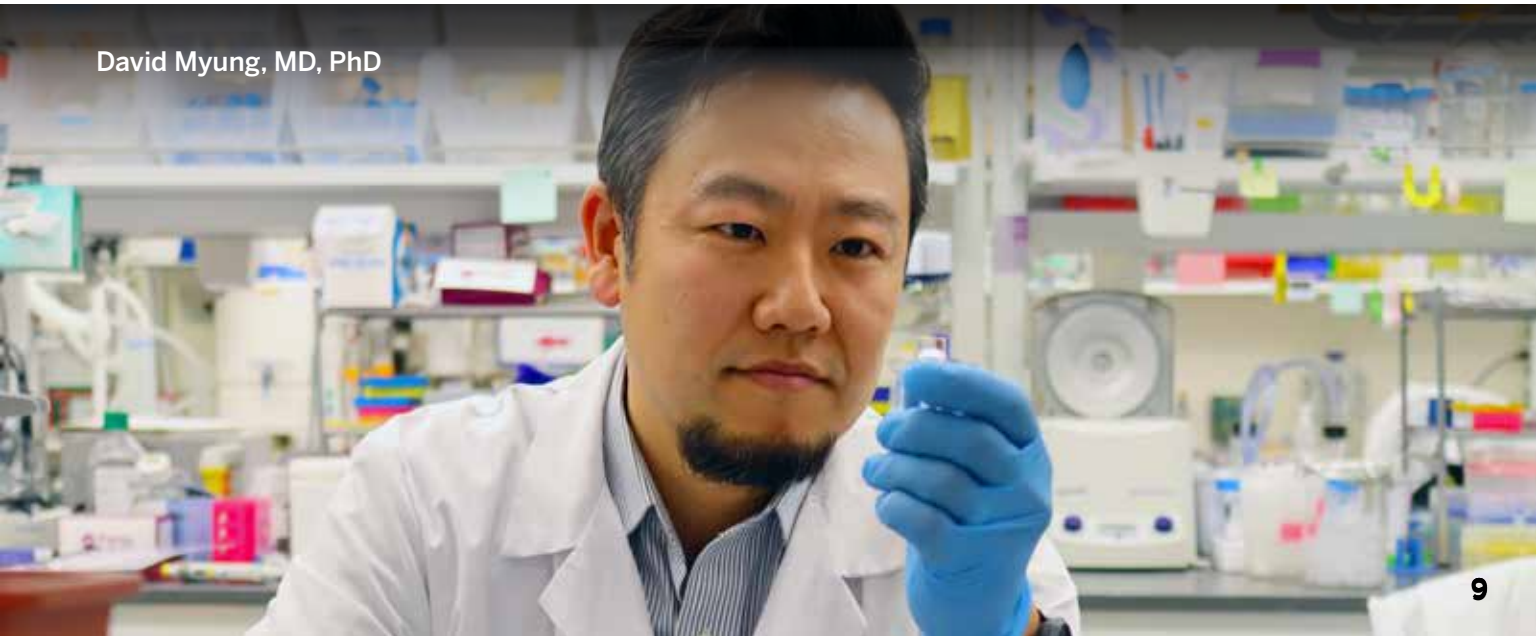
Extending the capabilities of a previously developed imaging system that can provide robotically aligned optical coherence tomography for semi-automated retinal imaging of patients.

Uri Soiberman, MD

The Johns Hopkins University School of Medicine

Developing the first topical medical treatment (eye drops) for keratoconus—a progressive disease that causes bulging of the cornea and blurry vision.

David Myung, MD, PhD





Colin J. Barnstable, DPhil

RPB Stein Innovation Awards

Named after RPB's founder, Dr. Jules Stein, this award was developed to uncover and encourage high-risk/high-gain vision research that is innovative and cutting-edge. It provides \$300,000 over 3 years to researchers whose goal is understanding the visual system and the diseases that compromise its function. The proposed research cannot be funded— previously or currently—by others.

Colin J. Barnstable, DPhil

Pennsylvania State University College of Medicine

Using epigenetic modifiers to alter patterns of gene expression in ways that promote photoreceptor cell survival, which is necessary for vision, and which is disrupted in diseases like retinitis pigmentosa and dry age-related macular degeneration.

Cintia S. de Paiva, MD, PhD

Baylor College of Medicine

Investigating specific receptors for cytokines (chemical messengers that take information between cells) located in the corneal epithelium to determine if they are functional and, if so, if they promote corneal health.

Kirill Martemyanov, PhD

University of Florida Scripps Biomedical Research

Defining and studying photoreceptor G protein coupled receptors, using a range of techniques, to enhance our understanding of how these cells function to detect light and transmit it to the brain.

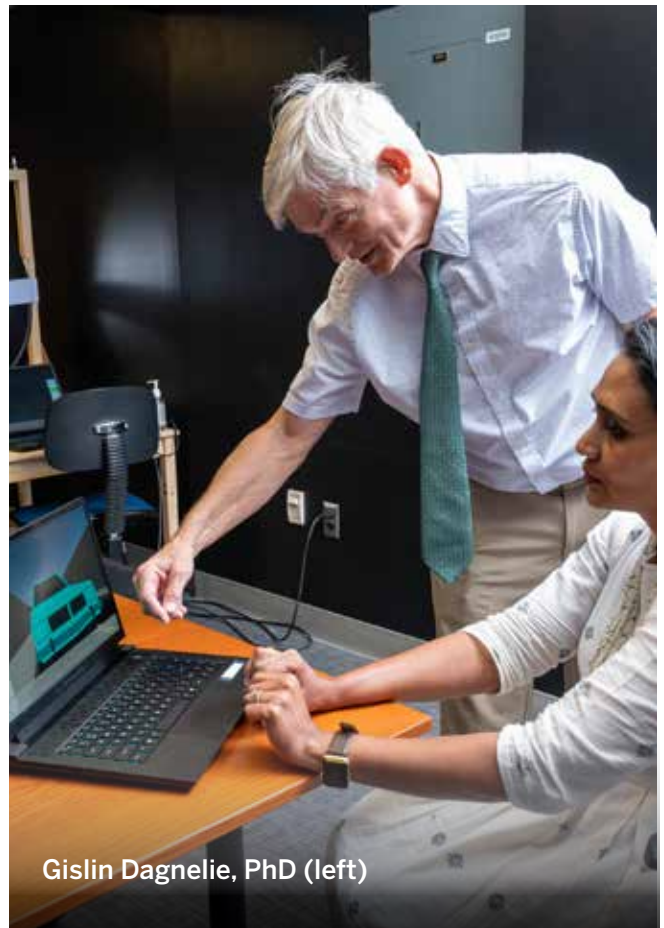
RPB/Lions Clubs International Foundation Low Vision Research Award

Low vision is a substantial and chronic loss of visual ability, not correctable by eyeglasses, contact lenses, medicines or surgery and includes degradation of central and/or peripheral vision. This \$300,000 award seeks greater understanding of how the visual system and brain respond to severe and chronic visual loss.

Gislin Dagnelie, PhD

The Johns Hopkins University School of Medicine

Stroke patients can lose vision in the left or right half of the visual field, in either eye; this research is providing new knowledge about the mechanisms of visual adaptation in patients who lost vision in this manner.



Gislin Dagnelie, PhD (left)

RPB Catalyst Awards for Innovative Research Approaches for Age-Related Macular Degeneration

This \$300,000 award is designed to support novel, ground-breaking research into age-related macular degeneration (AMD), with the ultimate goal of creating effective treatments for this increasingly common and debilitating condition. We are proud to partner with several other organizations that are committed to ending vision loss from AMD to offer these awards.

RPB/International Retinal Research Foundation Catalyst Award

Kaustabh Ghosh, PhD

The Regents of the University of California, Los Angeles

Studying how the blood vessels in the outer retina (choroidal vessels) degenerate early on in AMD.

RPB/Dr. H. James and Carole Free Catalyst Award

Yali Jia, PhD

Oregon Health & Science University

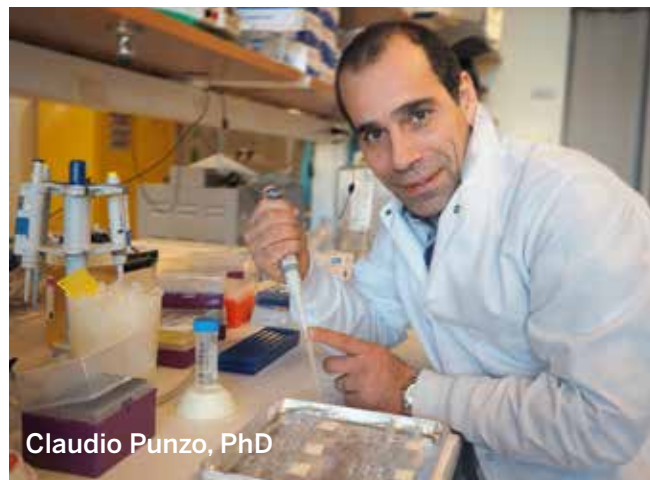
Developing a new, ultra-high-speed imaging platform based on optical coherence tomography that will enable localized measures of neurovascular coupling—the mechanism that links neural activity to subsequent changes in cerebral blood flow.

RPB/American Macular Degeneration Foundation Catalyst Award

Claudio Punzo, PhD

University of Massachusetts Chan Medical School

Developing a new small molecule approach to treat wet AMD, the advanced form of the disease in which blood vessels in the eye leak into the macula, which provides central vision.



Claudio Punzo, PhD



Kaustabh Ghosh, PhD (left) and a colleague

RPB Walt & Lilly Disney Award for Amblyopia Research

This \$100,000 award is available to MDs, PhDs or MD/PhDs conducting research of unusual significance into the diagnosis and treatment of amblyopia (commonly referred to as “lazy eye”), which develops in up to 4% of children, causing decreased vision without detectable anatomic damage.

Roger Wing-Hong Li, BSc (Optom), PhD

Nova Southeastern University

Building upon the researcher’s previous work developing a novel binocular treatment for adult patients with amblyopia using three-dimensional video games, the researcher will establish a new protocol for treating children.

RPB International Research Collaborators Awards

This \$75,000 award promotes international collaborations through which researchers in the U.S. and outside the U.S. gain new knowledge and skills. Under a reciprocal arrangement, a U.S.-based researcher—MD, PhD, or MD/PhD with a primary appointment in a department of ophthalmology or other relevant department—will be funded to develop a new or deeper collaboration with a research collaborator outside the U.S. in order to advance vision science.

Vladimir J. Kefalov, PhD

The Regents of the University of California, Irvine

Collaborator: Pere Garriga, PhD, Professor, Universitat Politècnica de Catalunya, Spain

Determining the molecular mechanism by which the G90D and G90V rhodopsin mutations cause night blindness and retinal degeneration, respectively.

Mengyu Wang, PhD

Harvard Medical School / MEEI

Collaborator: Franziska G. Rauscher, PhD, Principal Investigator, Leipzig University, Germany

Creating personalized profile norms based on individual retinal anatomy to improve glaucoma diagnostic accuracy.



RPB Medical Student Eye Research Fellowships

This \$30,000 grant allows outstanding medical students to take a year off from medical school to devote time to a research project in an RPB-supported department of ophthalmology while working closely with a mentor. The fellowship is designed to encourage talented medical students to consider careers as physician-scientists working in eye research.

Binh Cao, conducting research at the University of California, San Francisco, School of Medicine
Mentor: Jeremy Keenan, MD, MPH

Kyle S. Chan, conducting research at Northwestern University Feinberg School of Medicine
Mentor: Jeremy A. Lavine, MD, PhD

Owen D. Clinger, conducting research at the University of Pittsburgh School of Medicine
Mentor: Yuanyuan Chen, PhD

Monica Sophia Diaz-Aguilar, conducting research at the Board of Trustees of the Leland Stanford Junior University
Mentor: Jonathan Lin, MD, PhD

Maxwell B. Lohss, conducting research at the University of Pittsburgh School of Medicine
Mentor: Leah Byrne, PhD

Megan E. Paul, conducting research at The Regents of the University of California, Los Angeles
Mentor: Anne L. Coleman, MD, PhD

RPB/American Osteopathic Colleges of Ophthalmology & Otolaryngology-Head and Neck Surgery Foundation Medical Student Eye Research Fellowship

Soha Noorani, conducting research at Duke University School of Medicine
Mentor: Cynthia Toth, MD

RPB/Castle Biosciences Medical Student Eye Research Fellowship in Ocular Cancer

Shreya Sirivolu, conducting research at Keck School of Medicine of the University of Southern California
Mentor: Jesse L. Berry, MD

RPB/Janssen Medical Student Eye Research Fellowship

Cherrell Price, conducting research at Harvard Medical School / MEEI
Mentor: Kinga Bujakowska, PhD



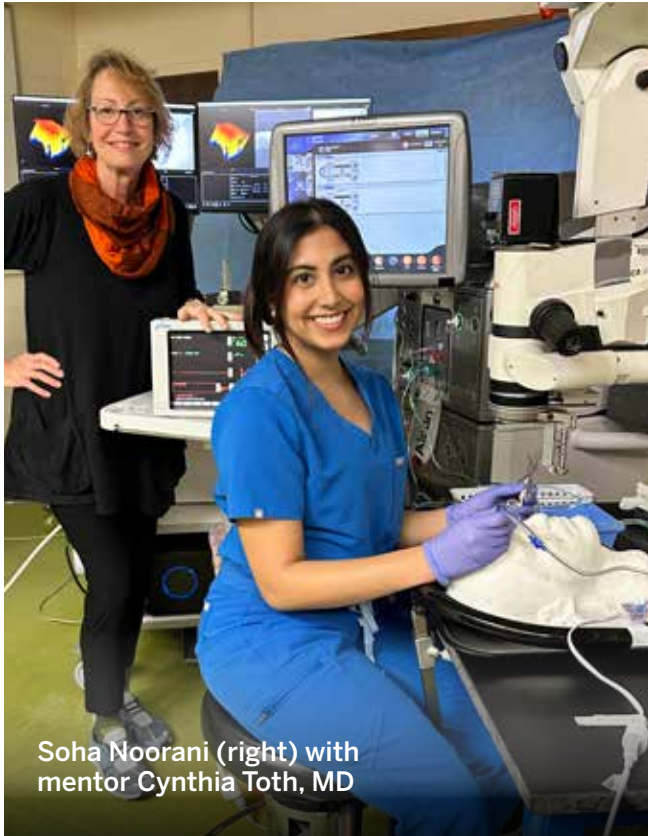
Owen D. Clinger



Monica Sophia Diaz-Aguilar



Megan E. Paul



Soha Noorani (right) with mentor Cynthia Toth, MD

Partnership Research Grants

In 2022, RPB worked with several well-respected partner organizations to support grants made by those organizations to highly qualified scientists in areas of strategic interest.

RPB/AAO Awards for IRIS Registry Research

RPB was pleased to again partner with the American Academy of Ophthalmology (AAO) on the RPB/AAO Awards for IRIS Registry Research, a joint award administered by AAO. The award enables researchers to use AAO's IRIS® Registry—the nation's largest specialty clinical database—to conduct population-based studies in ophthalmology and blindness prevention.

Congratulations to the 2022 awardees:

Mary Elizabeth Hartnett, MD, Board of Trustees of the Leland Stanford Junior University*

Kyle Kovacs, MD, Weill Cornell Medical College

Adrienne Scott, MD, The Johns Hopkins University School of Medicine

Victoria Tseng, MD, PhD, David Geffen School of Medicine at UCLA

**Grant was made when Dr. Hartnett was at the University of Utah Health Sciences Center*

RPB David F. Weeks Award for Outstanding Vision Research

RPB provided support to the Association of University Professors of Ophthalmology (AUPO) for the RPB David F. Weeks Award for Outstanding Vision Research, which is administered by AUPO to recognize and celebrate an outstanding ophthalmic vision scientist whose research has made meaningful contributions to the understanding and/or treatment of potentially blinding eye diseases. The award carries the name of David F. Weeks, former President and Chairman of Research to Prevent Blindness, in honor of his contributions to the field of vision research.

The 2022 awardee was **Donald J. Zack, MD, PhD**, of The Wilmer Eye Institute and The Johns Hopkins University School of Medicine. Dr. Zack is the Guerrieri Professor of Genetic Engineering and Molecular Ophthalmology and co-director of the Center for Stem Cells and Ocular Regenerative

Medicine. His lab studies the control of gene expression in retinal ganglion cells, the cells whose death in glaucoma leads to visual loss and potentially blindness. Dr. Zack and his colleagues are studying the differentiation of stem cells into retinal ganglion cells, in the hope of restoring vision to glaucoma patients who have already lost vision. Congratulations to Dr. Zack!

TGF (sponsored by Patricia Hill) – RPB Fellowships in Glaucoma

RPB partnered with The Glaucoma Foundation (TGF) to fund the TGF (sponsored by Patricia Hill) – RPB Fellowships in Glaucoma, which support under-represented minority researchers who are pursuing glaucoma research. The award is administered by The Glaucoma Foundation.

Congratulations to the 2022 fellows:

Clara Maria Colon Garcia-Moliner, MD, Wayne State University School of Medicine

William Gomes de Matos Plum, MD, Columbia University Irving Medical Center

Jose Quiroz, MD, PhD, Icahn School of Medicine at Mount Sinai



William Gomes de Matos Plum, MD (left)

Strategic Support

In 2022, RPB provided grants to select organizations that provide critical, complementary services, to make the vision research field stronger for all.



Educating Policymakers About Vision Research

RPB supported the Alliance for Eye and Vision Research (AEVR) in its efforts to educate policymakers and the public about the value of federally-funded vision research with a 2022 grant of \$50,000. With RPB support, AEVR held its Eighth Annual Emerging Vision Scientists (EVS) Day on Capitol Hill, which enables early-career researchers to engage with members of Congress and Congressional staff to discuss their research and the importance of funding for their work.

“It was exciting to see both the knowledge and passion that the Emerging Vision Scientists bring to their research. The excellent training session by AEVR helped the scientists do a masterful job of summarizing their research in accessible and meaningful ways to intelligent lay and policy audiences,” said Brian F. Hofland, PhD, President of RPB.

AEVR also utilized RPB support to hold events for legislators called Congressional Briefings, which educate members of Congress and their staff about the human impact of these conditions and the need for federal funding to advance vision research.

Supporting Ophthalmology Leadership

RPB provided a \$175,000 grant to support the activities of the Association of University Professors of Ophthalmology (AUPO), which supports academic departments of ophthalmology and their leadership, as well as promotes excellence in ophthalmic education, fosters vision research and promotes ethical practice in eye care.

The grant included \$50,000 to support the RPB David F. Weeks Award for Outstanding Vision Research (detailed on the previous page).

Supporting Early-Career Researchers

RPB provided a grant to the Heed Ophthalmic Foundation (HOF) (\$34,000, payable over 2 years) to renew RPB’s support for HOF’s Resident Retreats, which provide professional development experiences to talented ophthalmology residents from across the country. The Retreats encourage residents to pursue academic careers in ophthalmology.

RPB also provided additional funding to HOF to support well-qualified under-represented minority candidates in The Heed Fellows program, which provides funding for postgraduate studies in ophthalmology and ophthalmic sciences.



Special Event: Vision Research Funding Partnership

RPB was pleased to bring together leaders from more than 30 different organizations at the 2022 Vision Research Funding Partnership meeting, where funders of vision research talked about opportunities to advance the field, as well as common challenges. Special thanks to our excellent keynote speakers: Dr. Michael Chiang, Director of the National Eye Institute, and Dr. Sharon Fekrat, Professor of Ophthalmology, Professor in Neurology, Associate Professor in the Department of Surgery, at Duke University School of Medicine.

2022 RPB APPROVED GRANTS TOTAL: \$11,079,000*

U.S. medical schools receiving new 2022 departmental and/or individual investigator awards

STATE	RPB GRANTEE INSTITUTIONS	TOTAL GRANTS 2022	TOTAL SUPPORT INCLUDING 2022
ALABAMA	University of Alabama at Birmingham School of Medicine	\$ 115,000	\$ 5,590,000
CALIFORNIA	The Regents of the University of California, Irvine	190,000	1,890,000
	The Regents of the University of California, Los Angeles	795,000	11,785,750
	University of California, San Diego, School of Medicine	115,000	5,025,000
	University of California, San Francisco, School of Medicine	495,000	13,424,256
	Keck School of Medicine of the University of Southern California	30,000	6,534,795
	Board of Trustees of the Leland Stanford Junior University	645,000	2,871,450
COLORADO	University of Colorado School of Medicine	115,000	1,193,000
FLORIDA	University of Florida / Scripps Biomedical Research	300,000	5,295,600
	University of Miami Miller School of Medicine	115,000	5,887,700
	Nova Southeastern University	100,000	100,000
GEORGIA	Emory University School of Medicine	300,000	4,352,100
ILLINOIS	University of Illinois at Chicago College of Medicine	465,000	6,191,712
	Northwestern University Feinberg School of Medicine	30,000	4,180,000
IOWA	University of Iowa Carver College of Medicine	115,000	5,812,425
MARYLAND	The Johns Hopkins University School of Medicine	715,000	14,660,140
MASSACHUSETTS	Harvard Medical School	570,000	14,025,315
	University of Massachusetts Chan Medical School	300,000	300,000
MICHIGAN	The Regents of the University of Michigan School of Medicine	465,000	11,628,050
	Wayne State University School of Medicine	115,000	4,978,000
MISSOURI	Washington University in Saint Louis School of Medicine	115,000	10,929,981
NEW YORK	Columbia University Irving Medical Center	265,000	7,413,167
	New York University Grossman School of Medicine	115,000	2,812,250
	University of Rochester School of Medicine & Dentistry	465,000	5,865,250
	SUNY Upstate Medical University	115,000	4,570,000
NORTH CAROLINA	Duke University School of Medicine	445,000	10,325,150
OHIO	Cleveland Clinic Lerner College of Medicine of CWRU	115,000	5,140,000
	The Ohio State University College of Medicine	300,000	450,000
OKLAHOMA	University of Oklahoma Health Sciences Center	115,000	6,346,600
OREGON	Oregon Health & Science University School of Medicine	415,000	7,757,150
PENNSYLVANIA	University of Pennsylvania School of Medicine	115,000	7,663,500
	Pennsylvania State University College of Medicine	300,000	300,000
	University of Pittsburgh School of Medicine	525,000	7,498,372
TENNESSEE	Vanderbilt University School of Medicine	115,000	4,980,500
TEXAS	Baylor College of Medicine	415,000	6,989,060
UTAH	University of Utah Health Sciences Center	115,000	7,145,300
WASHINGTON	University of Washington School of Medicine	115,000	5,892,638
WISCONSIN	University of Wisconsin-Madison School of Medicine & Public Health	265,000	7,213,750

*Includes commitments for special grants to the Alliance for Eye and Vision Research, the American Academy of Ophthalmology, the Association of University Professors of Ophthalmology and the Heed Ophthalmic Foundation.

Schools that received earlier RPB support but no new grant in 2022: Indiana University School of Medicine and Icahn School of Medicine at Mount Sinai.

The RPB grant approval process is highly competitive. A standing Scientific Advisory Panel (SAP) and rotating Ad Hoc Committees convene each spring and fall to review all grant applications. Ad Hoc Committees are comprised of ophthalmology department chairs and expert researchers whose recommendations are forwarded to the SAP for further evaluation. The SAP includes distinguished scientists representing a broad range of scientific disciplines and interests. Their recommendations are presented to the RPB Board of Trustees for final approval. We thank our committees for their dedication!

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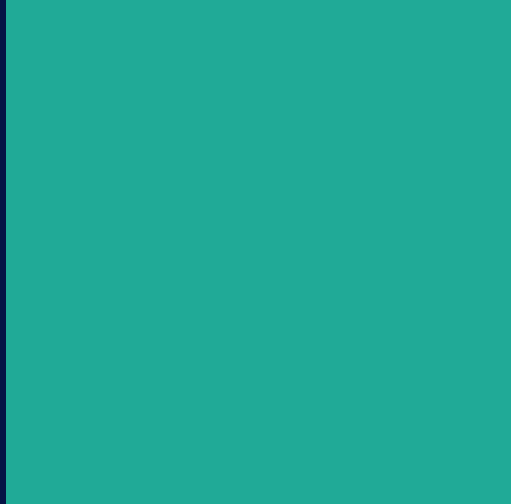
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