



# TRANSPLANTING A HUMAN EYE

Ever  
Brighter

UNIVERSITY OF MIAMI  
THE CAMPAIGN FOR OUR NEXT CENTURY

**At Bascom Palmer Eye Institute**, we continually push the frontiers of research, patient care, and education to **improve and restore the gift of sight**. Bascom Palmer is the No. 1 eye institute in the nation, as ranked by the *U.S. News & World Report*. This national standard underscores our dedication to eradicating eye diseases around the world. Every day, our physician-scientists focus on treating eye diseases with the latest technology and conduct research to find solutions for incurable eye diseases. In fact, throughout our history, we have patented treatments and surgeries for eye disorders and diseases that have become standards of care around the world.

## A Visionary Idea

Our scientists envision a day in which they can restore the miracle of sight to millions of people through a “scientific Everest” — **the transplantation of an entire human eye**. One of only four organs that scientists have never been able to successfully transplant, an eye transplant will involve groundbreaking technology that could ultimately restore vision for millions of patients.

With your support, we can solve the many challenges of making an eye transplant a reality. These challenges are incredibly complicated. Our researchers must find ways to overcome the body's immune responses that might reject the transplant and build the pathways for optic nerve regeneration or reconnection to the brain — critical to our ability to understand what we see.

## A Cascade of Innovations

The journey to transplanting an eye will spark a cascade of innovations. New partnerships with experts in surgical transplantation, neurosciences, cellular and molecular biology, bioengineering, computational science, and statistics will get us closer to our goal. Through these collaborations, we can deliver **solutions to every major eye disorder** that causes blindness, including glaucoma and diabetic retinopathy.

This multifaceted approach to eye transplants will lead to even broader investments in science and humanity. The technology and techniques learned will benefit patients experiencing a range of other disorders, including cardiovascular diseases, diabetes, spinal cord injuries, deafness, Alzheimer's disease, Parkinson's disease, and multiple sclerosis.

## Amplifying Our Progress in Science

Bascom Palmer's reputation and outreach are unparalleled, inviting the kind of partnerships and talent required to fulfill our vision. **We attract the best and**



**the brightest**, and scientists worldwide look to us for what it will take to make the next innovative leap. We serve one of the most diverse populations in the nation, which continues to make us equipped to handle a wide range of eye issues. We have the experience, and the insights, to make innovative advances and treatment options based on eye diseases across diverse populations.

## Converging Breakthroughs

Your support will activate promising efforts that are converging towards the goal of total eye transplant. **Our scientists are pushing phenomenal innovations** in Bascom Palmer's orbital research laboratory, where we are making leaps in understanding and creating the eye's orbit and the optimal environment required to put in a new eyeball.

We are leveraging 3D printing to reproduce certain parts of the eyeball. A dedicated group of scientists is working on the metabolism of the eye and the nutrients it needs to function. Our data science researchers are looking into how the optic nerve processes data and how to transfer bits of data from the eye to the brain using alternate mechanisms from the ones naturally formed. Along the way, we are learning to better deliver stem cell and gene therapies.

These and many more efforts are underway to eliminate eye diseases and give hope to millions around the world.

## Help Us Restore the Gift of Sight

Transplanting an eye requires philanthropy that will help us drive the sustained level of strategic and powerful scientific collaborations required to transplant an eye. **We need your support to truly innovate on science**, amplify global partnerships, vanquish eye diseases, and fulfill our profound vision to transplant a whole eye.

As an investor in Bascom Palmer, you are a partner who will celebrate our milestones with us and be our touchpoint as we make one breakthrough after another to restore the gift of sight.

For more information, please email [bpeidevelopment@med.miami.edu](mailto:bpeidevelopment@med.miami.edu) or call us:

Miami Development Office  
305-326-6190

Naples Development Office  
239-659-3986

Palm Beach Gardens  
Development Office  
561-515-1527

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