

The Vision Community Urges FY2024 Funding for the National Institutes of Health at \$50.924 Billion and National Eye Institute Funding of \$975 Million

Fiscal Year (FY) 2024 National Institute of Health (NIH) Funding Request: \$50.924 Billion

- The vision community thanks Congress for the \$17.38 billion in National Institute of Health (NIH) funding increases from FY2016-2023, helping the agency regain lost ground and build on past basic and clinical research discoveries.
- We thank Congress for the 5.6% increase in NIH funding from FY2022 to FY2023 as the NIH seeks to continue to support groundbreaking research.
- We urge Congress to continue to support NIH in the FY2024 appropriations process by requesting a funding increase of 7.3% (BRDPI of 2.3% plus 5% growth), which is in line with the last NIH Director's (Francis Collins) request to continue to build upon groundbreaking research.

Fiscal Year (FY) 2024 National Eye Institute (NEI) Funding Request: \$975 Million:

- We thank Congress for NEI's FY2023 enacted funding of \$896.55 million. However, NEI has continued to receive the base increase for all institutes (3.8% in FY2023) and has operated below inflation-adjusted dollars since FY12. With the current NEI investment 27.6% greater than the FY2012 funding level of \$702.7 million, it lags the over 30.3% inflation that has occurred during the same period. To account for inflation and to address the looming crisis of age-related vision disorders in the United States, we urge Congress to allocate \$975 million for NEI in FY2024.
- Vision disorders have the fifth-highest direct medical costs at an estimated \$182.5 billion in 2022 only
 less than heart disease, cancers, emotional disorders, and pulmonary conditions. The U.S. is spending
 over \$545 per American on the treatment of vision disorders every year, while only spending \$2.50 per
 American on research that can prevent these conditions and improve outcomes.
- The Centers for Disease Control (CDC) estimates that three-in-five Americans over 40 have eye and vision problems (90 million Americans). By 2050, without effective interventions, CDC estimates a 72% increase in diabetic retinopathy, an 87% increase in cataracts, a 100% increase in glaucoma, a 100% increase in macular degeneration, and a 150% increase in vision impairment and blindness, resulting in an annual cost of \$717 B for vision impairment and eye disease, (inflation-adjusted dollars).



Serving as Friends of the National Eye Institute

NEI FUNDING HAS RESULTED IN THE SUCCESSFUL COMMERCIALIZATION OF PRODUCTS TO SAVE SIGHT AND RESTORE VISION

NEI funding of investigator-initiated research grants and Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) grants has resulted in several commercialized products:

Optical Coherence Tomography (OCT)

OCT is an imaging technology that allows eye care providers to see the back of a patient's eye via a quick, non-invasive, and inexpensive exam. This technology supports a private commercial market of \$1 billion per year and more than 16,000 high-paying jobs. A peer-reviewed publication has shown that OCT saved Medicare \$9 billion and patients \$2.2 billion in co-pays by reducing unnecessary injections of drug therapies.

Drug Therapies for AMD and Diabetic Eye Disease

Development of the first generation of Food and Drug Administration (FDA)-approved anti-angiogenic ophthalmic drugs to inhibit abnormal blood vessel growth in "wet" AMD, stabilizing vision loss and, in some cases, improving lost vision. These drugs are currently being fast-tracked for approval by FDA for diabetic eye disease, including Diabetic Retinopathy and Diabetic Edema.

Over-the-Counter Nutritional Supplement to Reduce AMD Progression

NEI's *Age-Related Eye Disease Study (AREDS)* showed that a formulation containing vitamins C and E, beta-carotene, and minerals zinc and copper, reduced progression to advanced-stage AMD. New data from a follow-up study, *AREDS2*, suggest that replacing beta-carotene with lutein and zeaxanthin may produce a safer, more effective formulation.

Pressure-reducing Glaucoma Drugs

NEI-funded research has resulted in drug therapies that reduce intraocular pressure, a significant risk factor in the development of glaucoma – the second leading cause of vision loss in the U.S.

Sutureless Amniotic Membrane Graft

The graft is essentially a "biological bandage" that sits on the surface of the eye- the cornea-reducing scarring, prevention of blood vessel formation, and promoting healing while reducing pain.

Robotic Device to Facilitate Corneal Transplantation

The developer is using this device to transplant an artificial cornea, which is currently under FDA regulatory review, and which may obviate the need for donor corneal tissue.

Visual Aide Services Using Camera-Enabled Mobile Phones

This Smartphone application enables users to identify everyday objects, such as packaged goods, compact discs, and money, with text-reader capabilities using Optical Character Recognition (OCR).

Virtual Phaco Trainer for Cataract Surgery

This simulator enables ophthalmology residents to practice the difficult steps of standard cataract surgery without risk to patients.

Field Expansion Prism Glasses for Hemianopia

High power prisms incorporated into prescription eyeglasses increase the visual field by creating artificial peripheral vision in these patients who experience loss of peripheral vision on the same side of both eyes, a common side effect of stroke or Traumatic Brain Injury (TBI).