On March 9, AEVR held its World Glaucoma Week 2016 Congressional Briefing, co-hosted by all-major glaucoma societies and research organizations (see box below). Entitled Public Health Challenges in Glaucoma, the event focused on glaucoma incidence and prevention research funded by the NEI/NIH and the Centers for Disease Control and Prevention (CDC). Featured speaker David S. Friedman, M.D., PhD., M.P.H., addressed these issues, as he is an NEI- and CDC-funded clinician-scientist who serves as the Alfred Sommer Professor at the Wilmer Eye Institute of Johns Hopkins University (JHU) School of Medicine, is a professor in the Department of International Health at the Johns Hopkins Bloomberg School of Public Health, and is the Director of the Dana Center for Preventive Ophthalmology—a leader in global and domestic research on blindness prevention and the only World Health Organization (WHO) collaborating center in the United States.

Glaucoma, the second leading cause of preventable blindness in the United States, is a neurological disease affecting the optic nerve, causing loss of peripheral vision and ultimately blindness. Certain characteristics such as age, ethnicity, high intraocular pressure (IOP), and the appearance of the optic nerve are associated with disease development. Called the “sneak thief” of vision, it is frequently not diagnosed until vision loss occurs. NEI-funded research has found that, in the U.S., about 50 percent of those with the disease were unaware they had it. Globally by year 2020, 100 million individuals will have the disease, with about 90 percent of cases undiagnosed.

A major public health challenge is that glaucoma disproportionately affects underserved minority populations—it occurs four-to-five times more frequently in African Americans than Caucasians, and it is the most common cause of blindness in Hispanics, especially as they age. Dr. Friedman described a CDC-funded grant in which JHU is developing a model for community outreach. This model, which focuses on African Americans and Hispanics age 50-plus, seeks to streamline the approach to glaucoma screening while at the same time identifying other vision problems (including those that may result from chronic or systemic diseases, such as diabetes), to develop effective strategies for these patients to access needed healthcare. JHU is developing partnerships with churches, federally qualified health centers, and other disease groups to reach deeply into neighborhoods with education, diagnosis, and care.

Dr. Friedman also addressed the challenges of daily living for those with glaucoma, especially activities that maintain an individual’s independence. Reading is more difficult with glaucoma—an individual with it is more than twice as likely to slow down while reading, and those with the severe form of the disease are four-times more likely to be reading-impaired.

**Ongoing research will improve glaucoma detection, increase our understanding of the ways in which the disease impacts individuals, and result in better rehabilitation and preventive strategies to allow people to live healthy, independent lives.”**

—Dr. Friedman

Glaucoma severity is also associated with driving cessation, with the restriction of driving increasing with visual field loss. About one percent of older adults are not driving due to glaucoma.

Glaucoma also impacts mobility (gait, strength of steps, orientation) and the level of physical activity, which is important as lower activity levels are associated with increased mortality and greater incidence of chronic diseases, such as heart disease, diabetes, and osteoporosis. Falls are a significant public health issue, as they are the leading cause of accidental deaths in older adults. Vision loss increases the risk of falls, and initial research has shown that there is a two-to-four times greater risk of falls among glaucoma patients. NIH has initiated the Falls in Glaucoma Study to assess a cohort with glaucoma for falls and to determine when and why individuals with glaucoma fall.

From left: AEVR Executive Director James Jorkasky, Dr. Friedman, and Anthony Nguyen from the office of Cong. Scott Peters (D-CA), who has submitted a Programmatic Request for FY2017 NEI funding of $770 million, the vision community’s request.

Jessica Mulhearn from the office of Cong. John Sarbanes (D-MD) with Dr. Friedman

Dr. Friedman with Alexandra Menardy and Beth Vrabel, M.D., J.D. from the office of Senator Ben Cardin (D-MD)

**Upcoming AEVR Events**

**June 8**

**AEVR Congressional Briefing: Dry Eye: Today’s Research, Tomorrow’s Solutions**

12 Noon – 1:15 pm, House Rayburn B-339

**September 14**

**AEVR Congressional Briefing: International AMD Awareness Week 2016**

12 Noon-1:15 pm, House Rayburn B-338

**AEVR Congressional Reception: Second Annual Emerging Vision Scientists Day**

5:00 – 7:00 pm, House Rayburn 2168 (Gold Room)

(supported by a grant from RPB)