Vision Researcher Educates Congress on Research into Diabetic Retinopathy

“We’ve come a long way, but we still have a long way to go,” said vision researcher Neil Bressler, M.D. (The Wilmer Eye Institute/Johns Hopkins University) in a December 7 Congressional briefing on Diabetic Retinopathy, held in conjunction with the House and Senate Diabetes Caucuses and sponsored by the Juvenile Diabetes Research Foundation International (JDRF) and the Alliance for Eye and Vision Research (AEVR).

Dr. Bressler reviewed the status of various treatments and therapies emerging from federally funded research being conducted by the NEI within the NIH, as well as other industry sources and private foundations, such as JDRF. He focused on the current activities of a Diabetic Retinopathy Clinical Research (DRCR) Network, funded by the NEI in partnership with JDRF and consisting of 521 investigators (60 percent of which are community-based physicians) at 155 sites in 43 states. Dr. Bressler will chair the Network beginning January 1, 2006, following inaugural chair Dr. Lloyd Aiello, Jr. (Joslin Diabetes Center).

“Diabetic retinopathy is the most common complication of diabetes, and about half of patients with it do not know that they have it,” said Dr. Bressler, who identified improved detection techniques for early diagnosis as one focus of the DRCR Network’s research. With respect to treatments, he acknowledged the ongoing value of laser photocoagulation to inhibit macular edema associated with the leakage of capillaries in the retina, noting that this technique was developed through past collaborative research between the NEI and other scientists within NIH. “Due to this past NEI research, less than two percent of patients will go blind from diabetic retinopathy,” said Dr. Bressler, who cautioned that the full effectiveness of laser photocoagulation is still dependent on early detection and treatment, especially as new blood vessels begin to form in the retina.

He also reported on the latest NEI research, some of which is conducted in collaboration with industry, on ophthalmic drugs that may be beneficial for retinal swelling or edema from diabetes, and future collaborations evaluating factors that inhibit the formation of new blood vessels. “The anti-angiogenic (new blood vessel-inhibiting) medications are the first generation of ophthalmic drugs to cause improvement in some individuals with the “wet” form of AMD and are just starting to be evaluated in clinical trials for diabetic retinopathy,” said Dr. Bressler, who added that future treatments could potentially consist of a combination of these drugs and laser photocoagulation. Such studies are already underway and others are planned for implementation by the Network.

Dr. Bressler concluded by highlighting the importance of early detection and management of diabetes as a chronic disease, including educating patients about the current standard of care to reduce blindness complications. He also reiterated the importance of ongoing laboratory and clinical research that is demonstrating promising results and urged continuing Congressional support for the NIH/NEI, in terms of both federal funding and public-private initiatives, such as the current DRCR Network.

Dr. Bressler joins AEVR Executive Director James Jorkasky and JDRF Vice President for Government Relations Larry Soler

Diabetic Retinopathy was also the focus of Lighthouse International’s Schupf Centennial Invitational Symposia Series, held on October 21 in New York City. Among the researchers speaking were NEI Director Dr. Paul Sieving, who received the 2005 Pisart Vision Award from Lighthouse International President and CEO Dr. Tara Cortes at a celebration of the organization’s 100 years of service to the community. The award, established by the Arlene R. Gordon Institute of Lighthouse International, recognizes noteworthy contributions to the prevention, cure and treatment of severe vision impairment or blindness.