

Inaugural NEI 40th Anniversary Event Features Blind Mountain Climber

On April 3, the NEI initiated a series of events to celebrate its 40th anniversary, in which NAEVR and several network members participated. The NIH campus-based event, hosted by NEI Director Dr. Paul Sieving, featured blind mountain climber Erik Weihenmayer, who was visually impaired at birth by a genetic eye condition called retinoschisis and completely blind by age 13. Weihenmayer spoke and premiered his film *Blindsight*, which documented how he, his team, and six blind Tibetan teenagers journeyed up the north face of Mount Everest.

The program also featured groundbreaking technology being supported by the NEI that uses the tongue to get visual signals to the brain. BrainPort, developed by Madison, Wisconsin-based Wicab, Inc., uses a camera mounted on a person's head to send electronic signals to a small, flat surface attached to a person's tongue. The

tongue then sends visual cues to the brain that includes sizes, shapes, and relative distances. Michael Oberdorfer, Ph.D., who serves as the NEI's Director of the Strabismus, Amblyopia and Visual Processing, and Low Vision and Blindness Rehabilitation Programs, described the technology's ability to employ the "plasticity of the brain" in seeking other avenues to obtain and process information, such as sensory substitution used for other systems such as Braille. BrainPort, which requires training the brain incrementally using daily practice sessions, has been under development for about 12 years, with Food and Drug Administration (FDA) approval pending.

Weihenmayer noted that he has been involved for about five years in testing the BrainPort device and providing user feedback. "I thought it was cool how quickly my brain caught on to what I was feeling with my tongue," he said.

NAEVR Supports House and Senate Resolutions Acknowledging NEI 40th Anniversary

Since it serves as "The Friends of the NEI," NAEVR worked with its bipartisan House and Senate champions to secure resolutions that acknowledge the NEI 40th anniversary and support the designation of 2010-2020 as the *Decade of Vision*.

On June 16, the U.S. House of Representatives unanimously passed H. Res. 366. During House floor debate, lead Democratic sponsor Cong. Tammy Baldwin (D-WI) and original Republican co-sponsor Cong. Pete Sessions praised the accomplishments of the NEI in saving and restoring vision. Cong. Gene Green, resolution co-sponsor and co-Chair of the

Congressional Vision Caucus, echoed that support, noting that the country's vision health challenges will increase significantly in the next decade due to the aging of the population and the disproportionate increase of eye disease in fast-growing minority populations. In total, there were 114 co-sponsors for the bill. Cong. Baldwin and Cong. Sessions each issued press releases acknowledging passage.

On July 7, the Senate passed S. Res 209. The lead Republican sponsor was Senator Johnny Isakson (R-GA) and the original Democratic co-sponsor was Senator Ben Cardin (D-MD).



H. Res. 366 Lead Sponsor
Cong. Tammy Baldwin (D-WI)



Sen. Johnny Isakson (R-GA)



Sen. Ben Cardin (D-MD)

NAEVR urges the vision community to read the *Congressional Record* which documents the compelling statements made by Congs. Baldwin, Sessions, and Green, each of which provides a different perspective on the important role that NEI serves in preventing blindness and saving and restoring vision. The statements also commend NAEVR for its efforts to expand awareness of the incidence and economic burden of eye disease.

National Institutes of Health



Frontier of Vision Research

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National
Eye Institute

40th Anniversary Event



Left to right: NEI Director Paul Sieving, M.D., Ph.D., Ed Weihenmayer (Erik's father), Erik Weihenmayer, NEI Program Director Michael Oberdorfer, Ph.D., and Robert Beckman, President and CEO of Wicab, Inc.



Rebecca Hyder (left) and Cathy Cohen (right) from the American Academy of Ophthalmology with Rosemary Janiszewski (center), NEI's Associate Director for Communication, Health Education, and Public Liaison, who coordinated the event

On April 16-17, NEI also hosted an NIH campus-based Genetics and Genomics in Vision Symposium, which featured presentations on research into the genetic basis of a number of blinding eye diseases. The NEI has been a leader in research into the genetic basis of disease, as one-quarter of all genes discovered to date are related to eye disease. NAEVR Board President Dr. Stephen Ryan offered a clinical perspective in his comments, addressing the translation of genetic discoveries into diagnostics and treatments.



Left to right: National Advisory Eye Council (NAEC) Member and Symposium speaker Val Sheffield, M.D., Ph.D. (University of Iowa College of Medicine), NAEVR Board President Stephen Ryan, M.D. (Doheny Eye Institute), and NEI Director Paul Sieving, M.D., Ph.D.