Paul A. Sieving, M.D., Ph.D.
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Dr. Sieving is Director of the National Eye Institute, National Institutes of Health, since 2001. After graduate studies in nuclear physics at Yale University, he attended Yale Law School, and then received his MD and PhD in bioengineering from the University of Illinois. He did ophthalmology residency under Morton F. Goldberg, MD, at the University of Illinois Eye and Ear Infirmary, and was a post-doctoral fellow in retinal physiology with Roy H. Steinberg at UCSF. He studied inherited retinal degenerative diseases with Eliot L. Berson, MD, at Harvard. Dr. Sieving joined the faculty of the University of Michigan and held the Paul R. Lichter Chair in Ophthalmic Genetics. He founded the Center for Hereditary Retinal and Macular Degenerations at the UM and established the first CLIA certified laboratory in the US for Ophthalmic Molecular Diagnostics for hereditary retinal dystrophies. He holds elected membership in the National Academy of Medicine USA (2006) and the German National Academy of Sciences (2013).

As Director of the National Eye Institute, he oversees a budget of $730M that supports 1800 vision research scientists and clinicians at 245 institutions in the USA and abroad. He originated the "*NEI Audacious Goals Initiative*," a 15 year effort in human regenerative medicine to replace photoreceptors and retinal ganglion cells lost from disease. He continues clinical and research engagement as a tenured Senior Investigator in the NIH Intramural Research Program.

He is known internationally for studies of human retinal neurodegenerative diseases, termed retinitis pigmentosa and has published some 260 peer reviewed papers in ocular genetics and the pathophysiology of retinal dystrophies. Dr. Sieving has worked extensively on X-linked retinoschisis (XLRS). He created a transgenic XLRS mouse model (*IOVS 2004*) and demonstrated that XLRS is a synaptic disease with direct involvement of the rod-to-bipolar synapse (JCI 2015). He used gene therapy to deliver a normal *RS1* gene into eyes of XLRS mice, and this reversed the synaptic pathology and closed the retinal schisis cavities. These pre-clinical studies culminated in his successful FDA submission for an Investigational New Drug Application to initiate a human *RS1* gene therapy trial for human XLRS subjects (2015), and this is underway at the NEI.