Joan W. Miller, MD, FARVO Elected to the National Academy of Medicine

BOSTON (October 19, 2015) --Joan Whitten Miller, M.D., Henry Willard Williams Professor of Ophthalmology and Chair of Ophthalmology at Harvard Medical School, and Chief of Ophthalmology at Massachusetts Eye and Ear and Massachusetts General Hospital, has been elected to membership in the prestigious National Academy of Medicine (NAM). Dr. Miller is an internationally recognized expert on retinal disorders, including age-related macular degeneration (AMD), retinal degenerations, and diabetic retinopathy.

Established in 1970 by the National Academy of Sciences, the NAM—formerly named the Institute of Medicine—is a national resource for independent, scientifically informed analysis and recommendations on health issues. NAM serves alongside the National Academy of Sciences and the National Academy of Engineering to “address critical issues in health, medicine and related policy and to inspire positive action across sectors.”

“It is an honor and a pleasure to be counted among such a distinguished group of medical leaders, all of whom are major contributors to their fields and deeply committed to service,” noted Dr. Miller. “I am humbled to join their ranks and look forward to contributing my expertise to the NAM mission to improve the healthcare landscape on a national and global level.”

With a current membership of over 2,000, the NAM elects no more than 70 national and 10 international members each year. New members are elected by current active members through a selective process that recognizes eminent professionals who have made major contributions to the advancement of the medical sciences, health care, and public health and who are committed to volunteer service in activities of the National Academies of Sciences, Engineering, and Medicine.

“Election to the National Academy of Medicine is one of the highest honors in medicine,” said John Fernandez, President and CEO of Mass. Eye and Ear. “This underscores the tremendous
contributions that Dr. Miller has made to ophthalmic medicine and science during her exceptional career."

“As a clinician scientist and leader at Mass. Eye and Ear, Massachusetts General Hospital and Harvard Medical School, Dr. Miller has achieved many firsts in her field, broken numerous glass ceilings for women and made better the lives of millions of people around the globe,” said Peter Slavin, M.D., President of Massachusetts General Hospital. “I know she will have much to contribute to the National Academy of Medicine.”

Over the last two decades, Dr. Miller and her colleagues at Harvard Medical School/Mass. Eye and Ear pioneered the development of photodynamic therapy using verteporfin (Visudyne®), the first pharmacologic therapy for AMD able to reduce and slow vision loss. The group also identified the importance of vascular endothelial growth factor (VEGF) in ocular neovascularization, forming the scientific basis of current antiangiogenic therapies for neovascular AMD. Today, these treatments are saving the sight of millions of people worldwide.

For their role in the development of anti-angiogenic therapy for retinal disease, Dr. Miller and five HMS colleagues were among seven researchers honored with the 2014 António Champalimaud Vision Award – the highest distinction in ophthalmology and visual science. Dr. Miller and her colleagues continue investigations to elucidate the molecular pathophysiology of vision loss and develop improved therapies for retinal disease. Her current clinical and research interests focus on retinal disorders, including age-related macular degeneration (AMD) and diabetic retinopathy.

“Dr. Miller’s leadership in the field of retinal research means that millions of people worldwide will maintain their vision throughout their lifetime,” said Jeffrey Flier, M.D., Dean of Harvard Medical School. “Additionally, as a prolific author, an inspiring teacher and both the first woman professor and Department Chair in Ophthalmology at Harvard Medical School, Dr. Miller serves as a role model to young physicians everywhere. She is most deserving of this membership.”

“Dr. Miller’s multifaceted accomplishments speak volumes about her scientific and clinical depth of knowledge, and commitment to leadership in her field,” said Jean Bennett, the F.M. Kirby Professor of Ophthalmology at the University of Pennsylvania Perelman School of Medicine. “As a long-time colleague and fellow member of the NAM, I know she will utilize her legacy to the fullest and make pivotal contributions to the mission of the NAM.”

Dr. Miller has authored 150 peer-reviewed original research articles, 40 reviews, and 30 book chapters. Additionally, she has been a member of the investigative team for more than 20 clinical trial reports. Her clinical and scientific innovations have resulted in 11 U.S. patents and 10
international patents to date. She is editor of the journal *Ophthalmology*, a co-editor of *Albert and Jakobiec's Principles and Practice of Ophthalmology* (3rd Edition).

Dr. Miller is a Gold Fellow of the Association for Research in Vision and Ophthalmology (ARVO) and Chair LXVIII of Academia Ophthalmologica Internationalis. Other honors include the Rosenthal Award, the Gass Medal of the Macula Society, the Retina Research Award from the Club Jules Gonin, the Alcon Research Institute Award, the ARVO/Pfizer Ophthalmic Translational Research Award, the Founder's Award from the American Society of Retinal Specialists, the HMS Dean's Leadership Award for the Advancement of Women Faculty, the Suzanne Veronneau-Troutman Award from Women in Ophthalmology, the Paul Henkind Memorial Award from the Macula Society, and the Senior Achievement Award from the American Academy of Ophthalmology (AAO). Dr. Miller delivered the 2012 Edward Jackson Lecture for AAO, and in 2013 she was an ARVO Foundation Honoree. In 2015, she was awarded ARVO's Weisenfeld Award for Excellence in Ophthalmology.

Dr. Miller was born in Toronto, Ontario, Canada and is a graduate of Massachusetts Institute of Technology and Harvard Medical School. She completed her ophthalmology residency and a vitreoretinal fellowship at Mass. Eye and Ear. In addition to her professorship and leadership roles at Harvard Medical School, Mass. Eye and Ear and Mass. General Hospital, Dr. Miller is the director of the Angiogenesis Laboratory and a vitreoretinal physician in the Retina Services at Mass. Eye and Ear and Mass General Hospital. She is the first female physician promoted to the rank of Professor of Ophthalmology at Harvard Medical School, and the first woman to serve as chair of the Department of Ophthalmology.

Dr. Miller and her husband John live in Winchester, MA. John, a construction attorney, specializes in domestic and international engineering procurement and public-private partnerships in global infrastructure. The eldest of three children, their son John completed an ophthalmology residency and a vitreoretinal fellowship at Mass. Eye and Ear/Harvard Medical School; he is a staff physician on the Retina Services at Mass. Eye and Ear and Mass. General Hospital, and an HMS Clinical Instructor in Ophthalmology. Their son Douglas is a 2010 graduate of Harvard College, where he was co-captain of his college basketball team; he now works in construction management for Schermecker Property Services. Daughter Mary graduated from Harvard College in 2011, and is a third-year student at University of Michigan Law School.

**About Massachusetts Eye and Ear**

Mass. Eye and Ear clinicians and scientists are driven by a mission to find cures for blindness, deafness and diseases of the head and neck. Led by the Eaton-Peabody Laboratory in Otology, the Howe Laboratory in Ophthalmology, the Berman-Gund Laboratories for Retinal
Degenerations, and Schepens Eye Research Institute, Mass. Eye and Ear in Boston is the world's largest vision and hearing research center, offering hope and healing to patients everywhere through discovery and innovation. Mass. Eye and Ear is a Harvard Medical School teaching hospital and trains future medical leaders in ophthalmology and otolaryngology, through residency as well as clinical and research fellowships. Internationally acclaimed since its founding in 1824, Mass. Eye and Ear employs full-time, board-certified physicians who offer high-quality and affordable specialty care that ranges from the routine to the very complex. U.S. News & World Report’s “Best Hospitals Survey” has consistently ranked the Mass. Eye and Ear Departments of Otolaryngology and Ophthalmology as among the top hospitals in the nation.

About Harvard Medical School Department of Ophthalmology
The Harvard Medical School (HMS) Department of Ophthalmology (eye.hms.harvard.edu) is one of the leading and largest academic departments of ophthalmology in the nation. More than 350 full-time faculty and trainees work at nine HMS affiliate institutions, including Massachusetts Eye and Ear/Schepens Eye Research Institute, Massachusetts General Hospital, Brigham and Women’s Hospital, Boston Children’s Hospital, Beth Israel Deaconess Medical Center, Joslin Diabetes Center/Beetham Eye Institute, Veterans Affairs Boston Healthcare System, VA Maine Healthcare System, and Cambridge Health Alliance. Formally established in 1871, the department has been built upon a strong and rich foundation in medical education, research, and clinical care. Through the years, faculty and alumni have profoundly influenced ophthalmic science, medicine, and literature—helping to transform the field of ophthalmology from a branch of surgery into an independent medical specialty at the forefront of science.

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