PROMOTION RECOMMENDATION UNIVERSITY OF MICHIGAN MEDICAL SCHOOL DEPARTMENT OF OPHTHALMOLOGY AND VISUAL SCIENCES

Sayoko E. Moroi, M.D., Ph.D., associate professor of ophthalmology and visual sciences, with tenure, Department of Ophthalmology and Visual Sciences, Medical School, is recommended for promotion to professor of ophthalmology and visual sciences, with tenure, Department of Ophthalmology and Visual Sciences, Medical School.

Academic Degrees:

M.D./Ph.D.	1989	Ohio State University
B.A.	1974	Duke University

Professional Record:

2004-present	Associate Professor of Ophthalmology and Visual Sciences,
	University of Michigan
1995-2004	Assistant Professor of Ophthalmology and Visual Sciences,
	University of Michigan
1994-1995	Lecturer, Department of Ophthalmology and Visual Sciences,
	University of Michigan
1993-1994	Clinical Associate, Duke University Medical Center

Summary of Evaluation:

<u>Teaching</u>: Dr. Moroi continues to educate residents and fellows on glaucoma diagnosis, medical management and surgical management of patients with glaucoma. She has supervised first-year medical students on research projects between the first and second years of medical school. She has also supervised fourth-year medical students during research elective rotations. She serves as a mentor to fourth-year medical students throughout their application process to residency programs with active involvement in reviewing personal statements, providing support letters, and practicing mock interviews. All of her fourth-year medical student mentees have successfully entered ophthalmology residency programs. She has been the director of the glaucoma fellowship program since 2007. This involves assuring compliance with the national match program, reviewing training goals as recommended by the American Glaucoma Society, coordinating and organizing interviews for fellow candidates, submitting the match rank list, discussing progress on training expectations and goals with the fellows, and facilitating and advising on post-training placement of fellows with phone calls, letters of support and completing credentialing documents.

Research: Dr. Moroi's major areas of investigation have resulted in productivity on patient outcomes and collaborative genetic projects. Specifically on patient outcomes, she has focused on unusual pharmacological treatment reactions, surgical results, wound healing, clinical-pathological correlations, and participation in glaucoma clinical trials (i.e., OHTS and AGIS) and clinical pharmacology research. Specifically on genetics, she has been a key clinical contributor to a complex co-morbid glaucoma-retina phenotype that confirmed a novel causative mutation that was initially only attributed to a retina phenotype. She has also been a major clinical contributor to an otolaryngology project and glaucoma projects. She was first author on a genetics project focused on

case-control candidate gene study design. Through these experiences, Dr. Moroi became an integral participant in a glaucoma consortium, called NEIGHBOR (NEI Glaucoma Human Collaboration), with taking the lead on quantitative trait analysis of intraocular pressure and contributing role for central cornea thickness. Building upon these two areas of patient outcomes and genetics, she is positioned to lead a multi-center team to establish a much needed clinical database on aqueous humor dynamics under baseline conditions and glaucoma drug treatment. The long-term goal of her investigations is to prevent glaucoma-related blindness by discovering and validating biomarkers for clinical use to improve and advance patient treatment outcomes.

Recent and Significant Publications:

Moroi SE: Eyelash preservation during chemotherapy and topical prostaglandin therapy. *Arch Intern Med* 170:1269-1270, 2010.

Moroi SE, Raoof DA, Reed DM, Zöllner S, Qin Z, and Richards JE: Progress toward personalized medicine for glaucoma. (Invited review) *Expert Rev Ophthalmol* 4:145-161, 2009.

Elner VM, Newman-Casey PA, Patil JA, Al-Jadaan I, Flint A, Moroi SE, Edward DP: Aberrant wound healing response in mitomycin C-treated leaking blebs: A histopathologic study. *Arch. Ophthalmol* 127:1036-1042, 2009.

Radenbaugh P, Goyal A, McLaren NC, Reed DM, Musch DC, Richards JE, Moroi SE: Concordance of aqueous humor flow in the morning and nighttime in normal humans. *Invest Ophthalmol Vis Sci* 47:4860-4864, 2006.

Krafchak CM, Pawar H, Moroi SE, Sugar A, Lichter P, Mackey DA, Mian S, Nairus T, Elner V, Downs CA, Guckian-Kijek T, Trager EH, Rozsa F, Mandal MN, Epstein MP, Vollrath D, Ayyagari R, Boehnke M, Richards JE: Mutations in TCF8 cause posterior polymorphous corneal dystrophy and ectopic expression of COL4A3 by corneal endothelial cells. *Am J Hum Genet* 77:694-708, 2005.

Service: Clinically, Dr. Moroi maintains a thriving glaucoma practice and is the glaucoma service director at the Kellogg Eye Center. Over time, the glaucoma service has achieved a stable staff of six staff members. Dr. Moroi is well respected by the many ophthalmologists statewide and nationally, who refer their patients to her. With her experience, she attracts some of the most challenging glaucoma cases, which often involve co-management with the cornea and retina services. Dr. Moroi stepped up to take over the pediatric glaucoma service, and has also covered during several extended leaves on the adult service. In addition, she helps facilitate administration and evaluate instruments, such as ultrasound and optic nerve imaging. Dr. Moroi has a national presence as a member of several societies - among them the American Academy of Ophthalmology and the American Glaucoma Society. She is a frequent reviewer of major clinical and research journals in glaucoma and ophthalmology research. She also currently serves as a member of study section for the Glaucoma Research Foundation and has participated in the American Glaucoma Society Research Committee as a grant reviewer. She has accepted to contribute toward a second term as a glaucoma representative for the National Eye Health Education Program (NEHEP), National Eye Institute, NIH. Her departmental administrative participation includes serving as an ad hoc reviewer of clinical equipment and acting as chair on the ad hoc committee for glaucoma faculty recruitment. In addition, Dr. Moroi represents the department on the Medical Scientist Training Program Career Advisory Panel and the Pharmacy and Therapeutics Committee. Dr. Moroi also served as course

director and co-director on glaucoma clinical and research symposia and conferences held at the Kellogg Eye Center during the past several years.

External Reviewers:

Reviewer A: "Sayoko E. Moroi, MD, PhD is a nationally and internationally recognized and respected leader in our field of glaucoma. Her intellectual contribution in both genetic research and clinical research are among the top 5% among her peers. I believe her contributions as a teacher and mentor are among the top 1%."

Reviewer B: "Her contributions over the years have put her in a senior position in the field of glaucoma and she has been actively involved in the major glaucoma clinical trials performed in the last decade....Dr. Moroi is an outstanding world renowned glaucoma specialist and clinician scientist."

Reviewer C: "The questions regarding aqueous humor dynamics that Dr. Moroi is posing in her current research are truly cutting edge in the field....Dr. Moroi is definitely top tier in her peer group in academic glaucoma. There are very few physician-scientists in glaucoma and even fewer who are pursuing both clinical and investigative research in the field. Dr. Moroi excels as an educator and surgeon, putting her in an even more elite group."

Reviewer D: "...the area in which Dr. Moroi's publications have been especially important is the arena of genetics and the relationship of genes to various ophthalmic conditions. She has the good fortune of being able to work with one of the very best departments in the world in that regard, and she has made good use of it"

Reviewer E: "Her papers on the genetics of posterior polymorphous corneal dystrophy and on aqueous humor flow are outstanding and have contributed significantly to our understanding of important aspects of glaucoma. Dr. Moroi certainly belongs in the group of Professors of ophthalmology."

Summary of Recommendation:

Dr. Moroi has shown excellence and productivity in clinical work, research, and teaching. I am pleased to recommend Sayoko E. Moroi, M.D., Ph.D. for promotion to professor of ophthalmology and visual sciences, with tenure, Department of Ophthalmology and Visual Sciences, Medical School.

James O. Woolliscroft M.D.

Dean

Lyle C. Roll Professor of Medicine