

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

Steven M. Archer, M.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.	1978	University of Chicago
B.S.	1974	University of Utah

Professional Record:

1995-present	Associate Professor of Ophthalmology and Visual Sciences, University of Michigan
1988-1995	Assistant Professor of Ophthalmology and Visual Sciences, University of Michigan
1986-1988	Assistant Professor of Ophthalmology, Indiana University
1985-1986	Lecturer and Research Assistant, Department of Ophthalmology, Indiana University

Summary of Evaluation:

Teaching: Dr. Archer has had a profound effect on the residents whom he has taught over the past 22 years. In addition, he has helped mold a fellowship program that stands out among the 40 fellowship programs in the country. Graduates of Kellogg's residency and fellowship programs practice all over the country and around the world, both in private practice and in academic medicine. Along with being intimately involved in training ophthalmology residents and fellows in pediatric ophthalmology and strabismus, Dr. Archer also trains residents in specialties other than ophthalmology, giving lectures to pediatric hematology/oncology residents and fellows, radiation oncology residents and fellows, and neonatology nurses. His largest commitment outside ophthalmology, however, is to trainees in pediatrics, where he participates both in that department's Noon Conferences and the annual Pediatric Board Review Course. This past spring, Dr. Archer was on the faculty of the inaugural Ophthalmic Knowledge Assessment Program review course for residents in all training programs across southeastern Michigan. The department also supports one of the few orthoptics training programs in the country. These students train with Dr. Archer as he examines children and adults with strabismus. They then have an opportunity to examine these patients under Dr. Archer's supervision. The department has a strong training program for allied health professionals, and Dr. Archer presents lectures to these ophthalmic technicians. He also participates in outreach

programs, giving updates in pediatric ophthalmology to ophthalmologists in other parts of the state. Dr. Archer is regularly on the programs of national meetings and is involved in training residents in South America through the World Eye Mission and the Instituto Regional de Oftalmologia in Peru.

Research: Dr. Archer just finished as principal investigator on a University of Michigan Cancer Center-funded grant that investigates the efficacy of gold nanoparticles to treat retinoblastoma. In the past he has received National Eye Institute funding for projects that study the course of esotropia, and he was also part of a large collaborative national study assessing cryotherapy as a treatment for retinopathy of prematurity. He has published widely on the development of strabismus in neonates and infants and also has published findings from his clinical research on refractive changes in pseudophakic children. The combination of a background in engineering and an interest in optics has allowed him to study the physical optics of the normal eye and the effects of various methods of penalization treatment for amblyopia.

#### Recent and Significant Publications:

Pérez GM, Archer SM, Artal P: Optical characterization of Bangerter foils. *IOVS* 51:609-613, 2010.

Archer SM: The effect of medial versus lateral rectus muscle surgery on distance-near incomitance. *J AAPOS* 13:20-26, 2009.

Iacobucci IL, Furr BA, Archer SM: Management of binocular diplopia due to maculopathy with combined Bangerter filter and Fresnel prism. *Am Orthop J* 59:93-97, 2009.

Archer SM: Monocular diplopia due to spherocylindrical refractive errors. *Trans Am Ophthalmol Soc* 105:252-271, 2007.

Superstein R, Archer SM, Del Monte MA: Minimal myopic shift in pseudophakic versus aphakic pediatric cataract patients. *J AAPOS* 6:271-276, 2002.

Service: Clinically, Dr. Archer maintains a comprehensive pediatric ophthalmology and strabismus practice. He is well respected by the many ophthalmologists and pediatricians who refer their patients to him. Dr. Archer has been co-director of the pediatric ophthalmology and strabismus fellowship program since he joined the faculty in 1988. He has served on many departmental and medical school committees, including the faculty group practice finance committee and the electronic medical records committee. He is a national presence, as well, on committees for the American Association for Pediatric Ophthalmology and Strabismus as well as the American Academy of Ophthalmology. He is a frequent reviewer for the major clinical and research journals in pediatric ophthalmology and has been associate editor for the *Journal of the American Association for Pediatric Ophthalmology and Strabismus* since 2008.

#### External Review:

Reviewer A: "Dr. Archer is a scholar of the highest order. His continued goal to find difficult questions and to try and answer them using his mathematical and engineering skills has resulted

in significant breakthroughs in our understanding of some very complex problems. . . .Dr. Archer has established himself as an expert in several areas of pediatric ophthalmology, but he has been most recognized as one of the best critical thinkers in our field. . . .His interest in the treatment of infantile cataracts has made him an acknowledged international expert.”

Reviewer B: “Let me start out by saying that Dr. Archer is truly a ‘thinker.’ . . .I would describe Dr. Archer as being at the highest level of our peers in the world of pediatric ophthalmology and strabismus. . . .When Dr. Archer presents papers, people truly listen.”


Reviewer C: “His scholarship has impacted the dual specialty of pediatric ophthalmology and strabismus in many ways over his illustrious career. He is one of the leaders of our field, not only in terms of volume of production of lectures and publications, and in participating in leadership committees and boards, but also in terms of the quality of his thinking, which is characterized by originality.”

Reviewer D: “His particular area of expertise is not flashy, but is an essential element of pediatric ophthalmology i.e. optical-refractive elements in disease management. . . .Many clinicians never receive any grant funding. But Dr. Archer has participated as a co-investigator in multi-center trials as well as P.I. in his current grant.”

Reviewer E: “. . .Dr. Archer is best known nationally and internationally for his inquisitive mind and his ability to look beyond the obvious answer. . . .Dr. Archer is the true academic scholar. Dr. Archer is clearly recognized for his work in our field of pediatric ophthalmology, but also for his leadership in critical thinking.”

Summary of Recommendation:

Dr. Archer has shown excellence and productivity in clinical work, research, and teaching. I enthusiastically recommend the promotion of Dr. Steven M. Archer to professor, with tenure, in the Department of Ophthalmology and Visual Sciences.



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James O. Woolliscroft, M.D.

Dean

*Lyle C. Roll Professor of Medicine*

May 2011