Approved by the Regents
May 14, 2009

PROMOTION RECOMMENDATION
UNIVERSITY OF MICHIGAN
MEDICAL SCHOOL
DEPARTMENT OF OTORHINOLARYNGOLOGY

Marci M. Lesperance, M.D., associate professor of otorhinolaryngology, with tenure, Department of Otorhinolaryngology, Medical School, is recommended for promotion to professor of otorhinolaryngology, with tenure, Department of Otorhinolaryngology, Medical School.

Academic Degrees:

M.S.	1991	University of Michigan
M.D.	1988	University of Michigan
B.S.	1986	University of Michigan

Professional Record:

2002-present	Associate Professor of Otorhinolaryngology, University of Michigan
1996-2002	Assistant Professor of Otorhinolaryngology, University of Michigan

Summary of Evaluation:

Teaching: Dr. Lesperance has distinguished herself as an outstanding teacher in the Department of Otorhinolaryngology and as a Division Chief of Pediatric Otolaryngology. She is responsible for the Pediatric Otolaryngology teaching curriculum. In this role, she reviews not only content, but directly teaches residents in the clinic and the operating room and also teaches medical students. She has provided mentorship for undergraduate students who shadow her in the clinics and directly provides research teaching to both undergraduate and graduate students in her research laboratory. Her teaching consists of clinical settings, formal lectures within the department, and participation in didactic teaching. She has also lectured to the otolaryngology medical student interest group and has participated in gross anatomy laboratory teaching. She has mentored a great number of residents in their research and has been an invited lecturer to numerous institutions, including Wayne State University, Michigan State University, the Association for Research in Otolaryngology, the American Academy of Otolaryngology, the Northwest Academy of Otolaryngology, and the American Society of Pediatric Otolaryngology. Her research work has been recognized internationally and she has lectured in Canada, France, Italy and Ireland.

Dr. Lesperance's national teaching activities have been recognized with her selection as an examiner for the American Board of Otolaryngology and her service on the Task Force on New Materials for the American Board of Otolaryngology. She has been a home study course faculty for six years and co-chaired that group for two years. She is chair of the Pediatric Otolaryngology Educational Advisory Committee and a member of the Association for Research in Otolaryngology Long Range Planning Committee. She also serves on several national Academy of Otolaryngology committees dealing with hearing aids and education.

Research: Dr. Lesperance's research interests have focused on the molecular genetics of human deafness, including mapping and cloning of deafness genes. She has had ongoing grant support, including an R01 grant from the NIH on deafness, co-investigator awards from the American Otologic Society, and a variety of foundations and endowments. In addition, she has been the principal investigator of a T32 Training Grant entitled "Advanced Research Training in Otolaryngology." She was a recipient of a K23 award from the National Institute on Deafness. Her national and international reputation is recognized by her selection this year as a member of the Collegium Oto-Rhino-Laryngologicum Amicitiae Sacrum. This group is limited to 100 highly successful leaders in otolaryngology.

Dr. Lesperance's research has resulted in nearly 50 publications in outstanding journals, including the *Journal of Medical Genetics* and the *American Journal of Human Genetics*. Her research has been innovative and translational. She has worked on PCR Detection of Human Cytomegalovirus DNA in clinical specimens in the pediatric population and has successfully identified a gene for autosomal dominant hearing impairment (DNFA14) that maps to a region on chromosome 4p16.3, and an additional DNFA25 gene that maps to 12q21-24.

Dr. Lesperance has been involved in improving screening for newborn hearing deficits. She has also identified mutations in the Wolfram syndrome 1 gene as a cause of low frequency sensorineural hearing loss. She has worked diligently to collect pedigrees in families with hereditary hearing loss, including a family with Stapes Ankylosis and demonstrating both the phenotypic and genotypic effects of mutations in the Noggin gene associated with this syndrome. She has recently identified a new gene responsible for autosomal dominant auditory neuropathy (AUNA1) which maps to 13q14-21. This combined work has brought considerable recognition to the Department and the University of Michigan.

Recent and Significant Publications:

Ruel J*, Emery S*, Nouvian R, Bersot T, Amilhon B, Van Rybroek JM, Rebillard G, Lenoir M, Eybalin M, Delprat B, Sivakumaran TA, Giros B, El-Mestikaway S, Smith RJH, Moser T, Lesperance MM, Puel J-L: Impairment of SLC17A8 encoding vesicular glutamate transporter-3 (VGLUT3) underlies nonsyndromic deafness DFNA25 and inner hair cell dysfunction in null mice. *Am J Hum Genet* 83:278-292, 2008. [*co-first authors]

Sisk EA, Kim TB, Schumacher R, Dechert R, Driver L, Ramsey AM, Lesperance MM: Tracheotomy in very low birth weight neonates: indications and outcomes. *Laryngoscope* 116:928-33, 2006.

Kim TB, Isaacson B, Sivakumaran TA, Starr A, Keats BJB, Lesperance MM: A gene responsible for autosomal dominant auditory neuropathy maps to 13q14-21. *J Med Genet* 41:872-876, 2004.

Starr A, Isaacson B, Michalewski HJ, Zeng F-G, Kong Y-Y, Beale P, Paulson GW, Keats B, and Lesperance MM: A dominantly inherited progressive deafness affecting distal auditory nerve and hair cells. *JARO* 5(4) 2004.

Brown DJ, Kim TB, Petty EM, Downs CA, Martin DM, Strouse PJ, Moroi SE, Milunsky JM, Lesperance MM: Autosomal dominant stapes ankylosis, broad thumbs and toes, hyperopia and skeletal anomalies caused by heterozygous nonsense and framshift mutations in the noggin gene (NOG). *Am J Hum Genet* 71:618-24, 2002.

Service: Dr. Lesperance's service to the University and the Department of Otolaryngology has been extensive over the past 12 years. She served as chief of the Division of Pediatric Otolaryngology for the past five years and has been a valued advisor as part of the Department's Executive Committee. She has chaired the Department's Research Committee and has worked on a team to develop otitis media guidelines for the University of Michigan. She is currently serving as the user group leader for the C.S. Mott Children's and Women's Hospital Replacement Project.

For the past three years, she has been a member of the Residency Selection Committee, led the Pediatric Otolaryngology Clinical Operations Committee, and has been the medical director for the Pediatric Clinic, and now is director of the Pediatric Otolaryngology Ambulatory Care Unit. She serves on the Mott Operating Room Committee and has served on the University Subcommittee on Faculty Recruitment Retention and Leadership, chaired by former Provost Courant and President Coleman. She has served on numerous review committees for the National Institutes of Health and has been an editorial reviewer for a large number of journals. She currently serves as Chair of the Pediatric Otolaryngology Educational Advisory Committee for the American Academy of Otolaryngology.

External Review:

Reviewer A: "She is a nationally recognized authority in molecular genetics of hearing loss and has described the molecular genetics of a number of syndromes...She stands with a group of five or six pediatric otolaryngologists in the country who have made scientific contributions of this magnitude....She has an outstanding reputation among her colleagues and around the country as a thoughtful and accomplished physician and surgeon. I know a number of her trainees who testify to her excellence as a clinician and teacher."

Reviewer B: "She is considered among her peers as one of the top authorities in the field of Genetic Hearing Loss and has performed ground-breaking, NIH-funded research on the genetic causes of hearing loss in children."

Reviewer C: "I note that Dr. Lesperance is the Principal Investigator on an ongoing five year NIDCD/NIH R01 award on the molecular genetics of nonsyndromic auditory neuropathy. This is objective support for my opinion that Dr. Lesperance is recognized internationally as an outstanding scientist."

Reviewer D: "She has had numerous publications and presentations, and has been recognized on an international, national and regional level for her significant scholarly work. She is one of only a very few otolaryngologists and even fewer pediatric otolaryngologists who have been able to truly achieve and succeed in the difficult pathway as a clinician-scientist."

Reviewer E: "What is extremely impressive about Dr. Lesperance's work is that it represents very strong basic science and genetic analysis, which is not often found in our specialty."

Summary of Recommendation:

Dr. Marci M. Lesperance represents the very best that the University of Michigan has to offer in clinical care, teaching, and research in the Department of Otorhinolaryngology. She is an exemplary faculty member with outstanding service and scientific contributions. Her academic career has been focused and successful. She adds greatly to our national and international reputation and it is expected that she will continue to be an outstanding and productive clinician scientist at the professorial level. I am pleased to enthusiastically recommend Marci M. Lesperance, M.D. for promotion to professor of otorhinolaryngology, with tenure.

James O. Woolliscroft, M.D.
Dean
Lyle C. Roll Professor of Medicine

May 2009