

PROMOTION RECOMMENDATION  
UNIVERSITY OF MICHIGAN  
MEDICAL SCHOOL  
DEPARTMENT OF PEDIATRICS AND COMMUNICABLE DISEASES  
SCHOOL OF PUBLIC HEALTH  
DEPARTMENT OF ENVIRONMENTAL HEALTH SCIENCES

Joyce M. Lee, M.D., assistant professor of pediatrics and communicable diseases, Department of Pediatrics and Communicable Diseases, Medical School, and assistant professor of environmental health sciences, School of Public Health, is recommended for promotion to associate professor of pediatrics and communicable diseases, with tenure, Department of Pediatrics and Communicable Diseases, Medical School, and associate professor of environmental health sciences, without tenure, Department of Environmental Health Sciences, School of Public Health.

Academic Degrees:

M.P.H.	2006	University of Michigan
M.D.	2000	University of Pennsylvania
B.A.	1995	Brown University

Professional Record:

2011-present	Assistant Professor of Environmental Health Sciences, School of Public Health, University of Michigan
2006-present	Assistant Professor of Pediatrics and Communicable Diseases, University of Michigan

Summary of Evaluation:

Teaching: Dr. Lee has served as a teacher and role model to individuals at all levels across the University. She precepts fellows and medical students in the pediatric endocrinology clinics and on the inpatient service. She has given the large group lectures for the disorders of growth and development lecture for the endocrine module at the Medical School for the M2 students, and has led endocrinology small group discussions. She has given a variety of lectures to pediatric residents, pediatric and adult endocrinology fellows, primary care physicians at the University of Michigan and within the larger local pediatric community. She coordinates the Pediatric Endocrinology Research Seminar Series and organizes a survival skills course for the incoming pediatric endocrinology fellows during their first month of fellowship. She has taught classes to postdoctoral fellows in the Robert Wood Johnson Scholars Program, and she serves as a mentor to pediatric residents for the Evidence Based Medicine Journal Club. With regard to research mentorship, she has mentored 20 individuals, ranging from undergraduates from the Undergraduate Research Opportunity Program, medical students from the Student Biomedical Research Program, and postdoctoral fellows at the University Michigan School of Public Health. She has also worked with a significant number of masters level research assistants for her

clinical projects. For her research mentees, she has devised a comprehensive curriculum focused on writing grant proposals, research methods, epidemiology and biostatistics. She has received excellent teaching reviews from trainees who have worked with her.

Research: Dr. Lee is one of the few physician-scientists in the country who has formal dual training in pediatric endocrinology and pediatric health services research. Her research focuses on the overarching themes of childhood obesity and childhood type 1 and type 2 diabetes. Because of her specialized training, she has been able to approach these problems from a unique vantage point, using a variety of methodologies including applied clinical research, epidemiologic analyses of nationally representative data, state transition modeling, and cost-effectiveness analysis. Dr. Lee has had a prolific publication record, with 40 articles currently published or in press in peer-reviewed journals, 28 of which she is first or senior author. Her publications have appeared in the premier journals of the both the pediatric, diabetes, and obesity communities, including *Pediatrics*, *Archives of Pediatrics and Adolescent Medicine*, the *Journal of Pediatrics*, *Diabetes Care*, and the *International Journal of Obesity*. It is noteworthy that one of her most recent publications has had an impact on national guidelines for type 2 diabetes screening in children. The American Diabetes Association recently recommended that Hemoglobin A1c (HbA1c) be used exclusively to diagnose diabetes in adults as well as in children. Dr. Lee's published analysis demonstrating poor performance of HbA1c for identifying children and adolescents with diabetes and prediabetes has influenced the national leaders in pediatric diabetes to reassess and revise the American Academy of Pediatrics guidelines for type 2 diabetes screening in children.

Dr. Lee is the recipient of a K08 Mentored Career Development Award from the National Institute of Diabetes and Digestive and Kidney Diseases, titled "Childhood Obesity and Type 2 Diabetes Trends: A Life Course Analysis." With this innovative project, she has published sophisticated and state-of-the-art epidemiologic analyses using nationally-representative data, and has created a state transition model for predicting rates of type 2 diabetes based on current trends in pediatric obesity. These findings represent an important contribution to the fields of both pediatric and adult medicine, as well as public health and public policy. Dr. Lee has also conducted and published seminal work within the field of pediatric endocrinology focused on the relationship between childhood obesity and sexual maturation, which has led to her being awarded an R03 grant as the principal investigator to study the relationship between childhood obesity and linear growth, which has important implications for how clinicians should evaluate abnormal growth patterns in overweight and obese children. Dr. Lee has also spearheaded the participation of the University of Michigan in two nationwide multicenter observational studies focused on type 1 diabetes, the Type 1 Diabetes Exchange and the Pediatric Diabetes Consortium, serving as the principal investigator for both of these studies. Furthermore, she was designated as one of just six University of Michigan Brehm Investigators, a group of individuals who were selected based on their unique talents and skills to address the problem of type 1 diabetes.

Finally, Dr. Lee is actively involved in a clinical research project to validate nonfasting screening strategies for identifying children and adolescents with prediabetes and diabetes, a project which provides policymakers and clinicians with evidence-based screening test performance which is directly applicable to the pediatric primary care setting. This effort has been funded by

numerous extramural and intramural grants, for which Dr. Lee is the principal investigator, including an Investigator-Initiated Research Grant from Blue Cross Blue Shield of Michigan Foundation and a Pilot and Collaborative Grant funded by the Michigan Institute for Clinical and Health Research. The findings from this project have led to a national presentation at the American Diabetes Association Scientific Sessions.

#### Recent and Significant Publications:

Lee JM, Wu E, Herman WH, Tarini BA, Yoon E: Diagnosis of diabetes using hemoglobin A1c: Should recommendations in adults be extrapolated to adolescents? *J Pediatr* Dec 30, 2010. [Epub ahead of print]

Lee JM, Kaciroti N, Appugliese D, Corwyn RF, Bradley RH, Lumeng JC: Body mass index and timing of pubertal initiation in boys. *Arch Pediatr Adolesc Med* 164:139-144, 2010.

Lee JM, Pilli S, Gebremariam A, Keirms CC, Davis MM, Vijan S, Freed GL, Herman WH, Gurney JG: Getting heavier, younger: Birth cohort effects on obesity over the life course. *Int J Obes (Lond)* Dec 1, 2009. [Epub ahead of print]

Lee JM, Appugliese D, Kaciroti N, Corwyn RF, Bradley RH, Lumeng JC: Weight status in young girls and the onset of puberty. *Pediatrics* 119:624-630, 2007.

Lee JM, Okumura MJ, Davis MM, Herman WH, Gurney JG: Prevalence and determinants of insulin resistance among U.S. adolescents: a population based study. *Diabetes Care* 29:2427-2432, 2006.

Service: At the division level, Dr. Lee currently directs the Pediatric Endocrinology Research Seminar Series. At the departmental level she is a member of the Pediatrics Obesity Quality Committee and at the health system level, she is the only pediatric member of the Diabetes Quality Management Committee. As part of the Diabetes Committee, she has been spearheading the development of diabetes quality measures for the pediatric diabetes population as children become incorporated into the health system diabetes registry. Furthermore, at the national level, she is spearheading an Obesity Quality Improvement Initiative for the Pediatric Endocrine Society, the national organization of U.S. pediatric endocrinologists and for the American Board of Pediatrics. This initiative will be used for Maintenance of Certification for both pediatric generalists and Pediatric Endocrinologists. She is also a member of the Obesity Committee of the Pediatric Endocrine Society, which is developing a position statement on pediatric obesity for the society. Dr. Lee currently serves as an editorial board member for the journal the *Archives of Pediatrics and Adolescent Medicine*. She has served as a reviewer on two NIH study sections. Finally, she is on the advisory board for the National Childhood Obesity Foundation.

#### External Reviewers:

Reviewer A: "...she is one of very few in the field of Pediatric Endocrinology to also have formal training in health services research and she has developed an interesting and productive

niche in this field...I believe that Dr. Lee's work has impacted the field substantially and her trajectory suggests that these contributions are likely to continue."

Reviewer B: "Her articles are very important in helping the pediatric community understand the relationship between obesity and diabetes as well as the long term effect of obesity over the lifecourse...her research is already beginning to affect public policy...Dr. Lee has a growing national reputation as a rising star in endocrinology and health services research."

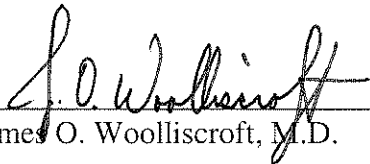
Reviewer C: "Dr. Lee has rapidly emerged as a leading scholar in her field...She already has established a reputation as an investigator of the top tier and at the leading edge...Given the track record of her achievements to date, I have little doubt that she would be awarded Tenure plus promotion to Associate Professor in the top 10 to 15 Medical Schools in the United States including our Medical School..."


Reviewer D: "She is nationally recognized for her cutting-edge scientific investigations into the causes and consequences of the pediatric obesity epidemic. Although she is incontrovertibly one of the 'rising stars' of pediatric endocrinology, her work reaches far beyond our specialty and will likely impact the lives of children everywhere."

Reviewer E: "...Dr. Joyce Lee is already a national leader in the field of pediatric diabetes and obesity research. I view her as a top-notch academic pediatric researcher who will continue to achieve over time."

Summary of Recommendation:

Based on her scholarly record, her extramural funding success and her superb teaching and mentoring roles we are confident that Dr. Lee's talent and dedication will ensure the success of her programs in childhood obesity and childhood diabetes. We are pleased to recommend Joyce M. Lee, M.D. for promotion to associate professor of pediatrics and communicable diseases, with tenure, Department of Pediatric and Communicable Diseases, Medical School, and associate professor of environmental health sciences, without tenure, Department of Environmental Health Sciences, School of Public Health.

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

  
Martin A. Philbert, Ph.D.  
Dean, School of Public Health

May 2012