

PROMOTION RECOMMENDATION
THE UNIVERSITY OF MICHIGAN
MEDICAL SCHOOL
DEPARTMENT OF INTERNAL MEDICINE
DEPARTMENT OF COMPUTATIONAL MEDICINE AND BIOINFORMATICS

Elizabeth K. Speliotes, M.D., Ph.D., assistant professor of internal medicine, Department of Internal Medicine, and assistant professor of computational medicine and bioinformatics, Department of Computational Medicine and Bioinformatics, Medical School, is recommended for promotion to associate professor of internal medicine, with tenure, Department of Internal Medicine, and associate professor of computational medicine and bioinformatics, without tenure, Department of Computational Medicine and Bioinformatics, Medical School.

Academic Degrees:

M.P.H.	2008	Harvard School of Public Health
M.D.	2002	Harvard Medical School
Ph.D.	2000	Massachusetts Institute of Technology
B.S.	1990	Yale University

Professional Record:

2011-present	Assistant Professor of Computational Biology and Bioinformatics, University of Michigan
2011-present	Assistant Professor of Internal Medicine, University of Michigan
2008-2010	Instructor of Medicine and Gastroenterology, Harvard Medical School

Summary of Evaluation:

Teaching: Dr. Speliotes actively participates in the teaching of students, residents and fellows, both in the clinical setting and through didactic lectures. She leads small group sessions for M1 students and provides interactive sessions on topics related to GI disease for medical students in the pathophysiology course. She also lectures to research trainees in such settings as the Computational Medicine and Bioinformatics Kickoff Meeting, the Taubman Institute Research Meeting, and the Proteomics Alliance for Cancer Research. Dr. Speliotes provides extensive mentoring for clinical trainees while attending on the gastroenterology consult and inpatient services, as well as for fellows in endoscopy and the gastroenterology clinic. She is also extremely involved in research mentoring on a one-on-one basis with undergraduate students, graduate students and post-doctoral fellows performing research projects in her laboratory. Her trainees have won research awards and gone on to academic faculty positions.

Research: Dr. Speliotes' research focuses on the use of human genetics to define the pathophysiology of human obesity and nonalcoholic fatty liver disease (NAFLD). She has played a key role in large multi-center consortiums such as the Genetic Identification of Anthropometric Traits (GIANT) Consortium and the Genetics of Obesity-related Liver Disease (GOLD) Consortium. While her work is highly collaborative, her lead role in these projects is evidenced by her first or senior authorship on many of the resulting papers. The impact of her work can be seen in the

numerous citations for her papers, as well as the top tier journals (including *Nature*, *Nature Genetics*, and *PLoS Genetics*) in which they are published. Dr. Speliotes has an impressive track record of funding, including a past NIH F32 individual training award and a NIH/NIDDK K23 grant, as well as current PI funding on a Doris Duke Foundation Grant and a NIH R01. She has four additional grant applications pending as a PI. The high regard in which Dr. Speliotes is held by her peers is reflected in her numerous invited national and international presentations, and peer-review service for high impact journals and NIH study sections. In 2013, she was inducted into the American Society for Clinical Investigation, and in 2014 she was the recipient of the Internal Medicine Jerome W. Conn Award for Distinguished Research.

Recent and Significant Publications:

Speliotes EK*, Yerges L*, Wu J*, et al: Genome-wide association analysis identifies variants associated with nonalcoholic fatty liver disease that have distinct effects on metabolic traits. *PLoS Genet* 7 e1001324, 2011.

Palmer ND, Musani SK, Yerges-Armstrong LM...Speliotes EK: Characterization of European-ancestry NAFLD-associated variants in individuals of African and Hispanic descent. *Hepatology* 58:966-975, 2013.

Berndt SI, Gustafsson S, Mägi R...Speliotes EK*, North KE*, Loos RJ*, Ingelsson E*: Genome-wide meta-analysis identifies 11 new loci for anthropometric traits and provides insights into genetic architecture. *Nat Genet* 45:501-512, 2013.

Mellinger JL, Pencina KM, Massaro, ...Speliotes EK: Hepatic steatosis and cardiovascular disease outcomes: An analysis of the Framingham heart study. *J Hepatol* 63:470-476, 2015.

Locke AE, Kahali B, Berndt JJ, . . North KE*, Ingelsson E*, Hirschhorn JN*, Loos RJF*, Speliotes EK*: Genetic studies of body mass index yield new insights for obesity biology. *Nature* 518:197-206, 2015.

Service: Dr. Speliotes is active in clinical care, seeing patients on the gastroenterology inpatient and consult services and in the gastroenterology clinic, and also performing endoscopy. She serves on the Gastroenterology Fellowship Research Committee, and interviews candidates for the Gastroenterology Fellowship Program and the Liver Fellowship Program. In 2012, she co-led the FastForward Initiative in Metabolic Disease and Personalized Medicine, and she is a member of the Gastroenterology Peptide Center, the Michigan Nutrition Obesity Center, and the Michigan Diabetes Research Center. Nationally, she is an active member of several professional societies, and provides ad hoc peer-review service for two NIH study sections and the Doris Duke Innovations in Clinical Research Awards.

External Reviewers:

Reviewer A: "...I would rate Dr. Speliotes' scholarship as outstanding, which has afforded her to earn both a major national and international reputation....Nearly all of Dr. Speliotes' manuscripts...are published in extremely high-impact journals such as *Nature*, *Nature Communications*, *Diabetes*, *Nature Genetics*, and *Science*."

Reviewer B: “My first observation was that I was surprised to find that Dr. Speliotes in an assistant professor and not a higher rank given that she is organizer of GOLD and PI of grants from GOLD. It is very unusual in modern genetics for a ‘junior’ faculty member to have the overall knowledge, experience, and general wherewithal to lead a complicated genetic study made up of multiple cohorts....I consider Dr. Speliotes to be a leader in the field of NAFLD and more broadly liver genetics and has been a major player in related genetic studies such as obesity genetics.”

Reviewer C: “...Dr. Elizabeth Speliotes is an outstanding junior faculty member with a national and international reputation as a leader in human genetics and the role of variations that define metabolic traits associated with obesity. She is a wonderful ambassador for the University of Michigan and an outstanding role model. Any academic Department of Medicine would be thrilled to have her as a colleague.”

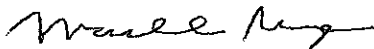
Reviewer D: “Based on her accomplishments over the past few years, Dr. Speliotes is clearly one of the leading national geneticists and genomics investigators in the field of obesity and fatty liver disease.”

Reviewer E: “She has an outstanding national reputation for her scholarly research; she has an outstanding track record of independent research, having demonstrated leadership and played key contributing roles on large team consortia; and she has made significant contributions to education.”

Reviewer F: “Given her interests in the genetics of NAFLD/NASH and the genetics of obesity, I think she can be viewed as the top GI physician-scientist in these fields and one of the leading scientists in the genetics of obesity, both remarkable testimonies.”

Summary of Recommendation:

Dr. Speliotes is recognized as a leader in the area of genetics of obesity and liver disease. She is also a dedicated educator and an outstanding clinician. Therefore, I enthusiastically recommend Elizabeth K. Speliotes, M.D., Ph.D. for promotion to associate professor of internal medicine, with tenure, Department of Internal Medicine, and associate professor of computational medicine and bioinformatics, without tenure, Department of Computational Medicine and Bioinformatics, Medical School.



Marschall S. Runge, M.D., Ph.D.
Executive Vice President for Medical Affairs
Dean, Medical School

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