PROMOTION RECOMMENDATION

The University of Michigan School of Public Health Department of Epidemiology

Emily T. Martin, assistant professor of epidemiology, Department of Epidemiology, School of Public Health, is recommended for promotion to associate professor of epidemiology, with tenure, Department of Epidemiology, School of Public Health.

Academic Degrees:

Ph.D.	6/2009	University of Washington
M.P.H.	6/2005	University of Washington
B.S.	4/2001	University of Michigan

Professional Record:

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2014 - Present	Assistant Professor, Department of Epidemiology, School of Public Health,	
	University of Michigan	
2010 - 2014	Assistant Professor, Tenure-Track, Eugene Applebaum College of Pharmacy	
	and Health Sciences, Department of Pharmacy Practice, Wayne State	
	University	
2009 - 2010	Post-doctoral Fellow, Division of Infectious Disease, Seattle Children's	
	Research Institute	
2005 - 2009	Clinical Research Associate, Division of Infectious Disease, Seattle	
	Children's Research Institute	
2003 - 2005	Graduate Research Associate, Department of Laboratory Medicine, Wald	
	Research Group, University of Washington	
2001 - 2003	Research Scientist/Engineer, Department of Genome Sciences, Nickerson	
	Laboratory, University of Washington	

Summary of Evaluation:

<u>Teaching:</u> Professor Martin's teaching is exemplary as evident from her teaching. In total, she has taught three courses as an assistant professor at the School of Public Health. Each of these courses are crucial to our Hospital and Molecular Epidemiology (HME) program. The first course entitled Molecular Epidemiology is a course that focuses on the integration of laboratory data with epidemiologic data. The second course entitled Molecular Techniques introduces students to basic laboratory techniques. The third course entitled Virus Diseases covers key topics in virology from a public health context. For this third course (Virus Diseases), Professor Martin developed all lecture materials and assignments from scratch.

Since joining the Epidemiology Department in 2014, Professor Martin has mentored 21 masters' students and two M.D. fellows. She is currently the chair for three epidemiology doctoral students and serves on the doctoral committee of one additional doctoral candidate. These doctoral students have been highly successful at competing for additional funding under Professor Martin's mentorship. Recent awards include a 2017 Rackham Summer Fellowship Award to Hannah Segaloff, a 2018 Rackham Pre-Doctoral Fellowship Award to Hannah

Segaloff, and an ASM Student Travel Award to Khalil Chedid. Professor Martin's trainees have produced five first-authored publications with three currently under review.

Research: Professor Martin is uniquely strong in both the molecular characterization of respiratory viral agents and the epidemiological characterization of the spread and persistence of these viral infections. Professor Martin and her research team have produced a number of high impact findings that have furthered our understanding of the molecular epidemiology of viral respiratory diseases. Another important area of research for Professor Martin is the intersection of respiratory infection morbidity and chronic disease. She has led influenza studies in high-risk populations and in health care settings. Her work on influenza vaccine evaluation during the 2015-2016 influenza season led her research team to demonstrate the lack of effectiveness of the live-attenuated nasally administered influenza vaccine.

Professor Martin's publication record is impressive. She has published 72 papers during her time in rank as assistant professor (ten as first author, eight as second author, and six as senior author). Since joining the faculty at the School of Public Health, she has published 27 papers, including one invited editorial. In total, Professor Martin has 82 publications (16 as first author, 11 as second author, and six as senior author). Many of these publications are in high impact journals, such as *New England Journal of Medicine*, *Journal of Infectious Disease*, *Clinical Infectious Diseases*, *Archives of Internal Medicine*, and *PLoS Medicine*. Prior to coming to the School of Public Health, Professor Martin received an NIH K01 award, two foundation-funded early career awards, and the Pfizer-sponsored ASPIRE award. Since coming to the School of Public Health in 2014, Professor Martin received a CDC U01 as a co-principal investigator, one CDC U01 component as project lead, and is currently the MPI of a NIH CEIRS award.

Professor Martin is well recognized in her field. Since joining the School of Public Health faculty in 2014, Professor Martin has given ten invited talks about her work, including symposiums at the 2016 Associations for Professionals in Infection Control annual meeting, the 2017 IDWeek annual meeting of the Infectious Diseases Society of America, and multiple Ground Rounds presentations. She also serves as a technical advisor for a CDC study of influenza vaccination of health workers in Israel and Peru.

Recent and Significant Publications:

- Harrison S., Wei M., Lamerato L., Petrie J.G., Martin E.T. (2018) Multimorbidity is associated with uptake of influenza vaccination. *Vaccine*. Jun 14;36(25):3635-3640. PMID: 29748031.
- Martin E.T., Kuypers J., Chu H.Y., Foote S., Hashikawa A., Fairchok M.P., Englund J.A. (2018) Heterotypic infection and spread of Rhinovirus A, B, and C among child care attendees. *J Infect Dis.* Aug 14;218(6):848-855. PMID: 29684211.
- Martin E.T., Kuypers J., McRoberts J.P., Englund J.A., Zerr D.M. (2015) Human bocavirus-1 primary infection and shedding in infants. *J Infect Dis.* Aug 15;212(4):516-24 PMID: 25632039.
- Martin E.T., Fairchok M.P., Stednick Z.J., Kuypers J., Englund J.A. (2013) Epidemiology of Multiple Respiratory Viruses in Childcare Attendees. *J Infect Dis.* Mar; 207(6);982-9. PMID: 23288925.
- Martin E.T., Fairchok M.P., Kuypers J., Magaret A., Zerr D., Wald A., Englund J.A. (2010) Frequent and prolonged shedding of bocavirus in young children attending daycare. *J Infect*

Dis. 201(11):1625-1632. Editorial Commentary: Williams JV. Déjà vu all over again: Koch's postulates and virology in the 21st century. J Infect Dis, 2010; 201(11):1611-1614. PMID: 20415535.

Service: Over the past four years, Professor Martin has served on the Department of Epidemiology Master's Committee, the Recruitment Committee, and Doctoral Committee. She currently is the co-chair of the Doctoral Committee. As a member of the Doctoral Committee, she incorporated non-cognitive interview assessments into the admissions process to encourage additional unbiased evaluations of candidates in addition to traditional metrics (e.g. GRE scores). Professor Martin's service at the national level is at the level expected of our tenured professors. This includes reviewing grants for the U.S. Army Medical Research and Material Command Program, and as a Data Safety Monitoring Board member for two NIH-funded trials of influenza vaccine. She is also an associate editor for the *Journal of Medical Virology* and served on the editorial boards of the *American Journal of Infection Control* and *Open Forum Infectious Diseases*. She has been an active member of the Society for Healthcare Epidemiology in America.

External Reviewers:

Reviewer A: "I am impressed by the quality, quantity, focus and scholarly impact of Dr. Martin's research ... She has clearly established a strong national reputation."

Reviewer B: "It is noteworthy that some of Dr. Martin's work has had a direct impact on public health practice..."

Reviewer C: "She has a particularly prominent role in leadership of the University of Michigan site for the US Influenza Vaccine Effectiveness Network to determine the 'real time' effectiveness of influenza vaccines. This work has been pivotal in decisions regarding the use of live attenuated influenza vaccines and in dictating vaccine policy."

Reviewer D: "Nationally, she has a national reputation as being a leader in the field of respiratory viruses."

Reviewer E: "Emily is a rising superstar in the field of respiratory virus epidemiology."

Reviewer F: "Few investigators at this stage in either career have done research that has been more impactful"

Reviewer G: "Dr. Martin's work on Bocavirus, where she was one of the first to define the early epidemiology of this unique virus in children, are seminal papers related to this pathogen."

Reviewer H: "These studies have advanced the field and provide a model for future molecular epidemiology. Thus, Dr. Martin's work is both significant from a molecular epidemiology standpoint and highly clinically relevant."

Reviewer I: "Professor Martin is...nationally recognized for her research in this area...her success in funding also reflects the quality and impact of her scholarship within the field of respiratory viral diseases."

<u>Summary of Recommendation</u>: Professor Martin will continue to play an important role in strengthening our Hospital Molecular Epidemiology group and keeping our MPH and PhD curriculum rigorous and high quality. She provides valuable service both internally, for the department and school, as well as externally, at the regional and national level. It is with the support of the School of Public Health Executive Committee that I recommend Emily T. Martin for promotion to associate professor of epidemiology, with tenure, Department of Epidemiology, School of Public Health.

F. DuBois Bowman, Ph.D.

Dean, School of Public Health

May 2019