PROMOTION RECOMMENDATION

The University of Michigan School of Public Health Department of Epidemiology

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

Academic	Degrees:

Ph.D.	2009	University of Washington School of Public Health, Seattle, WA
M.P.H.	2005	University of Washington School of Public Health, Seattle, WA
B.S.	2001	University of Michigan Ann Arbor, MI

Professional Record:

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2023 - Present	Co-Director, Michigan-Public Health Integrated Center for Outbreak
	Analytics and Modeling, University of Michigan School of Public Health,
	Ann Arbor, MI
2020 - Present	Co-Director, Center for Respiratory Virus Research and Response,
	University of Michigan School of Public Health, Ann Arbor, MI
2019 - Present	Associate Professor, Department of Epidemiology, School of Public
	Health, University of Michigan, Ann Arbor, MI
2014 - 2019	Assistant Professor, Department of Epidemiology, School of Public
	Health, University of Michigan, Ann Arbor, MI
2010 - 2014	Assistant Professor, Wayne State University, Eugene Applebaum College
	of Pharmacy and Health Sciences, Department of Pharmacy Practice,
	Detroit, MI
2005 - 2009	Clinical Research Associate, Division of Infectious Disease, Seattle
	Children's Research Institute, Seattle, WA
2003 - 2005	Graduate Research Associate, Department of Laboratory Medicine, Wald
	Research Group, University of Washington, Seattle, WA
2001 - 2003	Research Scientist/Engineer, Department of Genome Sciences, Nickerson
	Laboratory, University of Washington, Seattle, WA

Summary of Evaluation:

<u>Teaching:</u> Professor Martin has made significant contributions to the master's and doctoral programs in the Department of Epidemiology. Her teaching portfolio includes EPID 667 and EPID 668 (Professionalism, Practice and Communication), EPID 585 (Hospital and Molecular Epidemiology Seminar), EPID 543 (Epidemiology of Viral Diseases), EPID 605 (Introduction to Infectious Disease Epidemiology), EPID 890 (Doctoral Seminar in Epidemiology), and EPID 582 (Molecular Epidemiology). EPID 543 is an elective course that Professor Martin first developed in 2016. When she started teaching EPID 605 in the fall of 2019, Professor Martin revised the course to include more active learning and in-class small group assignments. EPID 890 is a required course for doctoral students, which helps guide them through the prospectus writing process. Professor Martin revised EPID 890 to include mentored small group writing sessions and chalk talks. Professor Martin incorporates principles from transparent assignment

design and backward course design to enhance transparency and accessibility for students from diverse backgrounds. She has also recently begun to incorporate anti-racist teaching practices into her courses, which are highly rated by students. Professor Martin also serves as track lead for the hospital and molecular epidemiology program and recently led the department's efforts to redesign the required professionalism, communication, and applied practice elements of the M.P.H. curriculum. Professor Martin is an avid mentor. During her time in rank, Professor Martin has chaired or co-chaired eight dissertation committees and served as a member of five dissertation committees. She has also mentored 27 master's students, five post-doctoral fellows, and four junior faculty members. Her trainees have published 14 first-authored manuscripts.

Research: Professor Martin's research focuses on viral respiratory diseases. She strives to understand not only the epidemiology of these diseases, but also to study and develop effective strategies to prevent their spread. Her research on COVID-19, flu, and RSV has been timely. For these highly infectious diseases, her research aims to understand how vaccines and other interventions can reduce transmission, how different pathogens interact, and how surveillance can improve our collective response. Her research has been at the forefront of the COVID-19 response both in the State of Michigan and nationally.

Professor Martin has a high level of research productivity. She has 12,320 citations on Google Scholar (as of December 10, 2023), an h-index of 57, and more than 200 peer reviewed publications. During her time in rank, Professor Martin has published more than 120 peer-reviewed research papers. Her most-cited publications are published in highly regarded journals such as the *Journal of the American Medical Association (JAMA)*, New England Journal of Medicine, Clinical Infectious Diseases, and the Morbidity and Mortality Weekly Report.

Professor Martin has been highly funded. She is the principal investigator (PI), co-PI, multiple PI (MPI), or subcontract PI on seven current grants and co-investigator on three more, with funding primarily from the National Institutes of Health (NIH) and the Centers for Disease Control (CDC). She is currently the PI on grants totaling \$15 million.

Recent and Significant Publications:

- Begley KM, Monto AS, Lamerato LE, Malani AN, Lauring AS, Talbot HK, Gaglani M, McNeal T, Silveira FP, Zimmerman RK, Middleton DB, Ghamande S, Murthy K, Kim L, Ferdinands JM, Patel MM, Martin ET. Prevalence and Clinical Outcomes of Respiratory Syncytial Virus vs Influenza in Adults Hospitalized With Acute Respiratory Illness From a Prospective Multicenter Study. *Clin Infect Dis.* 2023 Jun 8;76(11):1980-1988.
- Petrie JG, Eisenberg MC, Lauring AS, Gilbert J, Harrison SM, DeJonge PM, Martin ET. The variant-specific burden of SARS-CoV-2 in Michigan: March 2020 through November 2021. *J Med Virol*. 2022 Nov;94(11):5251-5259.
- Delahoy MJ, Mortenson L, Bauman L, Marquez J, Bagdasarian N, Coyle J, Sumner K, Lewis NM, Lauring AS, Flannery B, Patel MM, Martin ET. Influenza A (H3N2) Outbreak on a University Campus Michigan, October-November 2021. *MMWR Morb Mortal Wkly Rep.* 2021 Dec 10;70(49):1712-1714. PMID: 34882659.
- Martin ET, Cheng C, Petrie JG, Alyanak E, Gaglani M, Middleton DB, Ghamande S, Silveira FP, Murthy K, Zimmerman RK, Monto AS, Trabue C, Talbot HK, Ferdinands JM; HAIVEN Study Investigators. Low Influenza Vaccine Effectiveness Against A(H3N2)-Associated

Hospitalizations in 2016-2017 and 2017-2018 of the Hospitalized Adult Influenza Vaccine Effectiveness Network (HAIVEN). *J Infect Dis.* 2021 Jun 15;223(12):2062-2071. PMID:33140094.

Segaloff HE, Cheng B, Miller AV, Petrie JG, Malosh RE, Cheng C, Lauring AS, Lamerato LE, Ferdinands JM, Monto AS, Martin ET. Influenza Vaccine Effectiveness in the Inpatient Setting: Evaluation of Potential Bias in the Test-Negative Design by Use of Alternate Control Groups. *Am J Epidemiol*. 2020 Mar 2;189(3):250-260. PMID: 31673696.

Service: Within the Department of Epidemiology, Professor Martin has served as a track lead for the hospital and molecular epidemiology program, a co-chair of the Masters and Doctoral Committees, and a member of the Curriculum Committee, which oversaw a major revision of the M.P.H. curriculum during the 2022-2023 academic year. At the school level, Professor Martin has served as a member of the Research Council and as co-lead of Interdisciplinary Discovery, Engagement + Actions for Society for Combating Infectious Diseases. Her university service includes the Biosafety Level 3 Biosafety Review Committee, the President's Advisory Committee on Public Health, the Office of Research COVID-19 Priorities Committee, and the COVID-19 Campus Response Committee, where she served as lead of the Epidemiology and Surveillance Subcommittee and co-lead of the Data and Analytics Committee. She developed and implemented a campus-wide asymptomatic testing program (Community Sampling and Tracking Program) that provided up to 25,000 tests per week.

Professor Martin also provides important service beyond the academic community. During the COVID-19 pandemic, Professor Martin helped in numerous ways at the state and local level. For example, she led the development of metrics to track the spread of COVID-19 and risk at the community level. She was on the team that created the real-time COVID-19 dashboard for the State of Michigan. She provided weekly briefings (2020-2021) to State of Michigan leadership and continues to consult with the Michigan Economic Recovery Council. She received several awards from the State of Michigan and the University of Michigan for her important service, such as the UM President's Award for Public Engagement for State and National Leadership (2020), the UM Institute for Healthcare Policy and Innovation Impact Award (2020), and a Symbol of Excellence Recognition Coin in recognition of service to the state (2022).

During the pandemic she regularly appeared on national and local radio and television, and was frequently quoted in newspapers. Collectively she had more than 1,000 media appearances, including on National Public Radio, MSNBC, and the *New York Times*.

Professor Martin is an associate editor for the *Journal of Medical Virology* and has been on the editorial board of other journals, such as *Open Forum Infectious Diseases* and the *American Journal of Infection Control*. She has served on many study sections for NIH and the Department of Defense.

External Reviewers:

Reviewer A: "Her work is of high quality with soundly conducted and reported studies, likely a reason for her achieving impressive levels of funding support in these areas. Based on my review of the information presented to me Dr[.] Martin would meet the requirements for promotion at my institution."

Reviewer B: "Absolutely outstanding work, high impact, prolific and internationally recognized. She fills a void in the field. She more than fulfills the requirements for a similar position at my own institution."

Reviewer C: "Her work is innovative, impactful, practical, and seeks to identify problems and propose solutions. Her funding and publication records are impressive. Dr. Martin meets and exceeds the requirements for promotion to Professor at the University of Michigan and would also meet and exceed the requirements for promotion at [my university]."

Reviewer D: "Nationally and internationally recognized as a leader in the epidemiology of respiratory viral infection and the study of vaccine effectiveness. Yes, Dr. Martin would meet the criteria for promotion to the rank of Professor with Tenure in [my department at my university]."

Reviewer E: "Dr. Martin is well recognized as an expert in the field of respiratory pathogen epidemiology and vaccine effectiveness which is clearly evident by her substantial funding from NIH and CDC. In summary, Dr. Martin is well deserving of promotion [to] Professor of Epidemiology with Tenure. She would certainly be promoted to a similar position at [my university]."

Reviewer F: "Dr. Martin is an outstanding investigator whose work has addressed critical clinical and public health infectious disease issues. Yes. I have served on the [university] Professor Promotion Committee and lead our departmental promotion committee for Professor and believe Dr. Martin would be highly competitive for promotion."

<u>Summary of Recommendation:</u> Professor Martin has a national reputation as an expert and leader in her field and her research focused on the epidemiology of viral respiratory diseases and the development of effective strategies to prevent their spread has been critical and timely. It is with the support of the School of Public Health Executive Committee that I recommend Emily T. Martin be promoted to the rank of professor of epidemiology, with tenure, School of Public Health.

F. DuBois Bowman, Ph.D.

Dean, School of Public Health