PROMOTION RECOMMENDATION The University of Michigan School of Public Health

Aubree Gordon, associate professor of epidemiology, with tenure, and associate professor of global public health, without tenure, School of Public Health is recommended for promotion to professor of epidemiology, with tenure, and professor of global public health, without tenure, School of Public Health.

<u>Academic De</u> Ph.D. M.P.H. M.A. B.S.	2009 2005 2002 1998	University of California, Berkeley, Berkeley, CA University of California, Berkeley, Berkeley, CA University of California, Berkeley, Berkeley, CA University of North Carolina, Chapel Hill, NC
Professional Record:		
2021 - Present		Director, Michigan Center for Infectious Disease Threats, University of Michigan, Ann Arbor, MI
2020 - Present		Associate Professor of Global Public Health, School of Public Health, University of Michigan, Ann Arbor, MI
2019 - Present		Associate Professor, Department of Epidemiology, School of Public Health,
2014 - 2019		University of Michigan, Ann Arbor, MI Assistant Professor, Department of Epidemiology, School of Public Health,
2014 - 2019		University of Michigan, Ann Arbor, MI
2011 - 2014		Assistant Adjunct Professor, Division of Epidemiology, University of California,
2011 - 2011		Berkeley, Berkeley, CA Lecturer, Division of Epidemiology, University of California, Berkeley, Berkeley,
		CA
2010 - 2014		Assistant Researcher, Division of Infectious Diseases and Vaccinology, University of California, Berkeley, Berkeley, CA
2009 - 2012		Research Fellow, Division of Epidemiology, University of California, Berkeley, Berkeley, CA

Summary of Evaluation:

<u>Teaching</u>: Professor Gordon's record of teaching is very strong, and she has made important contributions to the master's and doctoral degree training programs. She has taught three courses at the University of Michigan (EPID 503, 601, and 605). Given her robust research program, and a sabbatical in 2020, this has been restricted to EPID 601, an advanced methods course that is optional for master's degree students and required for Ph.D. students, at the associate professor rank. Her evaluation ratings as an associate professor have been very good with median scores of 4.8 and 4.6 for Q1631 and median scores of 4.2 and 4.0 for Q199 on a 5-point scale.

Professor Gordon has previously advised or co-advised three Ph.D. students, is currently advising four Ph.D. students, and has advised four post-doctoral scholars. She has supervised 19 capstone projects and mentored nine students in the Minority Health International Research Training Program. She has also mentored five undergraduate students in the Undergraduate Research Opportunity Program, in addition to four junior faculty members. She has hosted over 30 student interns at her study's field site in Nicaragua.

<u>Research</u>: Professor Gordon is an internationally recognized researcher in the field of infectious disease epidemiology, particularly the dynamics of influenza transmission, as well as the natural history of infection, susceptibility to infection, and the development of immunity. She has established two

prospective cohorts, a birth cohort study, a household transmission study, a family cohort study, and an adult cohort study, several of which are ongoing. In addition to influenza, within these cohort studies she has also made high-impact contributions in the study of Dengue, Zika, Respiratory Syncytial Virus (RSV), and most recently SARS-CoV-2. Professor Gordon has extensive international collaborations that help facilitate her cutting-edge research on respiratory virus transmission and immunity.

Professor Gordon has 96 peer-reviewed publications including many in highly ranked scientific journals, including *Nature, Nature Medicine, Nature Communications, PNAS, Lancet, New England Journal of Medicine*, and several top infectious disease journals. Of the 50 of these papers that have been published since 2019, she is the first or corresponding author on 28. As of November 9, 2022, her publications have been cited over 9,200 times with an h-index of 38 and an i10-index of 67 (Google Scholar). Professor Gordon has an outstanding record for attracting research funding. She is currently the principal investigator (PI), multiple principal investigator (MPI), subcontract PI, or lead epidemiologist on several multi-million dollar grants, contracts, and supplements. The National Institute of Allergy and Infectious Diseases (NIAID) of the National Institutes of Health (NIH) and the St. Jude Center for Excellence for Influenza Research and Surveillance have provided over \$20 million in total awarded funds that she will oversee through 2028. Much of this funding is within large, international, multi-institutional centers and projects. She was also recently appointed the director for the new \$14 million Michigan Center for Influenza Biosciences Initiative.

Recent and Significant Publications:

- Ng, S., Nachbagauer, R., Balmaseda, A., Stadlbauer, D., Ojeda, S., Patel, M., Rajabhathor, A., Lopez, R., Guglia, A.F., Sanchez, N., Amanat, F., Gresh, L., Kuan, G., Krammer, F., Gordon, A. (2019) Novel correlates of protection against pandemic H1N1 influenza A virus infection. *Nat Med.* Jun;25(6):962-967. doi: 10.1038/s41591-019-0463-x. Epub 2019 Jun 3. PMID: 31160818; PMCID: PMC6608747.
- Gordon, A., Gresh, L., Ojeda, S., Katzelnick, L.C., Sanchez, N., Mercado, J.C., Chowell, G., Lopez, B., Elizondo, D., Coloma, J., Burger-Calderon, R., Kuan, G., Balmaseda, A., Harris, E. (2019) Prior dengue virus infection and risk of Zika: A pediatric cohort in Nicaragua. *PLoS Med.* Jan 22;16(1):e1002726. doi: 10.1371/journal.pmed.1002726. PMID: 30668565; PMCID: PMC6342296.
- Maier, H.E., Nachbagauer, R., Kuan, G., Ng, S., Lopez, R., Sanchez, N., Stadlbauer, D., Gresh, L., Schiller, A., Rajabhathor, A., Ojeda, S., Guglia, A.F., Amanat, F., Balmaseda, A., Krammer, F., Gordon, A. (2020) Pre-existing Antineuraminidase Antibodies Are Associated With Shortened Duration of Influenza A(H1N1)pdm Virus Shedding and Illness in Naturally Infected Adults. *Clin Infect Dis.* May 23;70(11):2290-2297. doi: 10.1093/cid/ciz639. PMID: 31300819; PMCID: PMC7245146.
- Maier, H.E., Kuan, G., Saborio, S., Carrillo, F.A.B., Plazaola, M., Barilla, C., Sanchez, N., Lopez, R., Smith, M., Kubale, J., Ojeda, S., Zuniga-Moya, J.C., Carlson, B., Lopez, B., Gajewski, A.M., Chowdhury, M., Harris, E., Balmaseda, A., Gordon, A. (2022) Clinical Spectrum of Severe Acute Respiratory Syndrome Coronavirus 2 Infection and Protection From Symptomatic Reinfection. *Clin Infect Dis.* 2022 Aug 24;75(1):e257-e266. doi: 10.1093/cid/ciab717. PMID: 34411230; PMCID: PMC8499752.
- Wraith, S., Balmaseda, A., Carrillo, F.A.B., Kuan, G., Huddleston, J., Kubale, J., Lopez, R., Ojeda, S., Schiller, A., Lopez, B., Sanchez, N., Webby, R., Nelson, M.I., Harris, E., Gordon, A. (2022)
 Homotypic protection against influenza in a pediatric cohort in Managua, Nicaragua. *Nat Commun.* Mar 4;13(1):1190. doi: 10.1038/s41467-022-28858-9. PMID: 35246548; PMCID: PMC8897407.

<u>Service</u>: Professor Gordon's record of professional service at the university and externally is excellent. Her university service includes leading the Michigan Center for Infectious Disease Threats, and serving on the university's Academic Affairs Advisory Committee and Human Rights Protection Program Advisory Committee. Within the Department of Epidemiology, she has chaired the departmental mentoring committee and has served on the doctoral committee and master's degree admissions committee. Outside the university, Professor Gordon has given numerous media interviews for high-profile publications, including the *New York Times, Scientific American*, the *Washington Post*, and National Public Radio. These interviews have provided valuable information about the COVID- 19 pandemic to the public. In addition to serving on the SARS-CoV-2 Variant Evolution (SAVE) working group, she has also served on the external advisory board for the New York Influenza Center of Excellence, the NIAID Steering Committee for Cohort Studies, and the organizing committee for the National Academies of Science 2019 Korean American Kavli Frontiers of Science Meeting. She has served as a consultant for the Centers for Disease Control and Prevention (CDC) and has aided the Nicaraguan Ministry of Health in establishing surveillance for influenza, SARS-CoV-2, Chikungunya, and Zika. She also regularly serves on grant review panels for NIAID and CDC and has been a peer reviewer for numerous high-impact journals.

External Reviewers:

Reviewer A: "The quantity and quality of her work and remarkable international reputation clearly establish her as a paradigm shifting thinker and multidisciplinary leader that is certain to continue to have an impact on global health for many years to come... Her success has been unparalleled, with few investigators demonstrating the ability to build a research portfolio of her size aimed at inspiring investigators from around the world to work together...Dr. Gordon is an inspiring leader. She has found a unique investigative niche and has established herself as a global voice of multidisciplinary research. She has lined up an outstanding team of collaborators and has committed herself to doing the very best science locally and internationally. She has an extra-ordinary ability to garner funding to make high impact science happen. Thus, she is unquestionably deserving of this promotion, and will undoubtedly have a global impact for decades to come."

Reviewer B: "Dr. Gordon is a world-class epidemiologist known for her expertly designed large-scale influenza studies...She is innovative and adept at identifying key questions in the field. This is particularly evident with her transmission studies that are elegantly designed to examine correlates of immune protection to influenza virus infection and the impact of host factors on transmission...Her works establishing anti-stalk antibodies as a correlate of protection in humans and examining the period of homotypic protection against influenza are particularly significant. Her international reputation is excellent, and she is known to be good collaborator...In summary, Dr Gordon is intelligent, innovative, collaborative and productive. She shows natural leadership and has an excellent international reputation and is doing impactful work. Without question, Aubree would be promoted to Professor at my institution and hence I have absolutely no reservations to recommend Dr Gordon to be promoted to Professor with tenure."

Reviewer C: "I am greatly impressed by the quality, quantity, focus and scholarly impact of Dr. Gordon's scientific output...I can think of only a few contemporary scholars worldwide who straddle the fields of applied epidemiology, statistical and clinical epidemiology and laboratory sciences, that is basic molecular biology. This combo is sorely needed for excellent implementation of large cohort studies and data analysis, so that the project continuously anticipates novel scientific questions...In my opinion, Dr. Gordon would definitely qualify for a promotion to full tenured professorship at my institutions...She also demonstrates mature leadership as a director at the Michigan Center for Infectious Disease Threats, and her engagement in the covid-19 pandemic crisis. Her scholarship is robust and impressive and has long been internationally recognized."

Reviewer D: "I have been impressed with the quality of Dr. Gordon's research, especially on influenza field studies in Nicaragua, which has been her main research focus. For example, recent publications (Maier et al. 2022 *Clin Infect Dis*, and Wraith et al. 2022 *Nat Commun*) clearly show the unique value of clinical studies examining immunologic correlates of influenza infection, so critically needed for the

effort to develop new generations of influenza vaccines. In an era when clinical field studies in infectious diseases are becoming rarer and ever more difficult to perform, it is fantastic to see a young investigator take on such long-term, high risk/high reward studies. Dr. Gordon is clearly already an influential scientist in this field of study and will surely continue to be a leader in her research area...Dr. Gordon's academic accomplishments also include an impressive number of funded projects, service to the university and governmental panels, and an amazing number of trainees at pre- and postdoctoral levels. I fully support her promotion to full professor with tenure."

Reviewer E: "Aubree's cohorts are unique scientific resources. Her commitment to and stewardship of these programs is notable and has led to significant funding, scholarship, and publications. Based upon ongoing and new funding, these cohorts will continue to support important field studies and Aubree's research program for many years to come. I expect her to continue publishing in high impact journals and to positively influence biomedical research and public health. Similarly, Aubree will continue to train the next generation of epidemiologists and research scholars, as well as having a positive impact on the University of Michigan and the field of respiratory disease public health through her service on grant review panels, as a reviewer, and advisor...Noting Aubree's extensive publication record, robust and consistent research funding, strong training program, and diverse collaborations, I can say with confidence that she will continue on this upward trajectory. It is without reservation that I recommend Aubree Gordon be promoted for Full Professor with tenure. She would certainly be advanced to the rank of Full Professor at [my institution]"

<u>Summary of Recommendation</u>: Professor Gordon is an outstanding researcher in the field of infectious disease epidemiology studying the dynamics of influenza transmission. She has a very good teaching record and an excellent record of service. It is with the support of the School of Public Health Executive Committee that I recommend Aubree Gordon for promotion to professor of epidemiology, with tenure, and professor of global public health, without tenure, School of Public Health.

F. DuBois Bowman, Ph.D. Dean, School of Public Health

May 2023