Approved by the Regents May 15, 2014

PROMOTION RECOMMENDATION
The University of Michigan
School of Public Health
Department of Environmental Health Sciences

Laura S. Rozek, assistant professor of environmental health sciences, Department of Environmental Health Sciences, School of Public Health, is recommended for promotion to associate professor of environmental health sciences, with tenure, Department of Environmental Health Sciences, School of Public Health [also assistant professor of otolaryngology-head and neck surgery, Medical School].

Academic Degrees:

Ph.D.	2005	University of Michigan, Epidemiologic Sciences
M.A.	2005	University of Michigan, Statistics
M.S.	1999	University of Washington, Epidemiology
B.S.	1994	University of Notre Dame, Biology

Professional Record:

2008-present	Assistant Professor, Environmental Health Sciences, University of Michigan School of Public Health
2008-present	Assistant Professor, Department of Otolaryngology-Head and Neck Surgery, University of Michigan Medical School
2005-2008	Post-doctoral Research Fellow, Division of Molecular Medicine and Genetics, University of Michigan Health Systems.

Summary of Evaluation:

Teaching: Professor Rozek has a strong record of effective didactic teaching, and is currently one of the most innovative educators within the department. In 2011, she joined a small team of faculty developing and implementing a new required curriculum for EHS MPH students (EHS 601). This represented a radical departure from previous courses in that it focused on integrating core disciplines and building on a case-study approach, and Professor Rozek was provided teaching relief in 2010 to develop the curriculum. As was expected with such a radical departure in curriculum for the department, student evaluations for the first two years were relatively low, but showed a substantial improvement from year one to year two. These were reflective of the nature of the curriculum change, and not of the instructors. Rather, Professor Rozek demonstrated considerable skill in crafting the curriculum and introducing innovative teaching elements.

In 2012, Professor Rozek took over responsibility for the core departmental executive course for non-EHS students (EHS 500). This is a tough course that has traditionally received relatively low ratings from students who are required to take it. Professor Rozek managed to turn the course around and achieve, for this course, very good ratings. Again, she was able to demonstrate a rare ability to connect and engage with students and to introduce innovative elements to the class.

During Winter 2014, Professor. Rozek is co-teaching the first comprehensive undergraduate EHS course. Her selection for this position was based on her considerable skills as a lecturer and educator. She has also been actively engaged in a select school-wide initiative to bring innovations in teaching to courses, and it is anticipated that the new undergraduate course will benefit substantially from this. In summary, Professor Rozek demonstrates considerable skill as an educator who is able to develop new content and deliver it effectively, while engaging fully with students.

Professor Rozek has supervised and continues to supervise the work of a number of graduate students. She is currently primary advisor to four Ph.D. students, and is a committee member for a further four

Ph.D. students. In addition, she has been the Master of Science thesis or field experience mentor for four students.

Research: Since joining the Department of Environmental Health Sciences, Professor Rozek has developed a highly regarded program around the molecular epidemiology of cancer and the environment. Her research has centered on defining divergent pathways of head and neck cancer and described the association between epigenetic modifications and modifiable environmental risk factors, studying cancer incidence and environmental risk factors in Thailand, and developing a screening model for potential toxicants and preventative compounds for breast cancer.

Professor Rozek's research uses highly integrative approaches to address the relationship between the genome and the environment by combining comprehensive epidemiologic data with next-generation molecular data. It uses study designs that take advantage of biologically relevant samples in conjunction with carefully collected, comprehensive epidemiologic and exposure data in unique populations to generate new knowledge that will inform public health solutions that address cancer risk and survival in the US and other countries. The majority of Professor Rozek's work in this area specifically addresses head and neck carcinogenesis. She has developed a cohort of head and neck cancer patients at the University of Michigan through her involvement with the University of Michigan Head and Neck Specialized Program of Research Excellence (SPORE) – she is currently the PI on one of the R01 projects that makes up the SPORE.

Professor Rozek has to date had 48 peer review papers published. On 12 of these she is either lead author or the lead author is a student or researcher working under her direct supervision. She has published in the leading journals in his field. According to the Scopus database, she has an H index of 18, indicating that 18 of her peer review papers have been cited at least 18 times. Her publications have been cited over 1400 times. Professor Rozek follows the convention of encouraging her students, trainees and collaborators to be the first author on papers that report work that was conducted as part of her research program.

Recent and Significant Publications:

Rozek LS, Dolinoy DC, Sartor MA, Omenn GS. "Epigenetics: relevance and implications for public health." *Annual Rev Pub Health.* (in press).

Perng W, Mora-Plazas M, Marín C, Rozek LS, Baylin A, Villamor E. (2013) "A prospective study of LINE-1 DNA methylation and development of adiposity in school-age children." *PLoS One,* 8(4):e62587.

Colacino JA, Dolinoy DC, Duffy SA, Sartor MA, Chepeha DB, Bradford CR, McHugh JB, Patel DA, Virani S, Walline HM, Bellile E, Terrell JE, Stoerker JA, Taylor JM, Carey TE, Wolf GT, Rozek LS. (2013) "Comprehensive analysis of DNA methylation in head and neck squamous cell carcinoma indicates differences by survival and clinicopathologic characteristics." *PLoS One,* 8(1):e54742. PMID: 23358896

Kim JH, Rozek LS, Sartor MA, Soliman AS, Hablas A, Seifeldin IA, Calafat AM, Colacino JA, Weinhouse C, Nahar MS, Dolinoy DC. (2013) "Bisphenol A associated epigenomic changes in prepubescent girls: A cross-sectional study in Gharbiah, Egypt." *Environ Health,* 12(1):33.

Colacino JA, Arthur AE, Dolinoy DC, Sartor MA, Duffy SA, Chepeha DB, Bradford CR, Walline HM, McHugh JB, D'Silva N, Carey TE, Wolf GT, Taylor JM, Peterson KE, Rozek LS. (2012) "Pretreatment dietary intake is associated with tumor suppressor DNA methylation in head and neck squamous cell carcinomas." *Epigenetics,*7(8):883-91.

Bakulski KM, Dolinoy DC, Sartor MA, Paulson HL, Konen JR, Lieberman AP, Albin RL, Hu H, Rozek LS. (2012) "Genome-wide DNA methylation differences between late-onset Alzheimer's disease and cognitively normal controls in human frontal cortex." *J Alzheimers Dis.* 29(3):571-88.

Rozek LS, Herron CM, Greenson JK, Moreno V, Cappella G, Rennert G, Gruber SB. (2010) "Smoking,

gender, and ethnicity predict somatic BRAF mutations in colorectal cancer." *Cancer Epidemiol Biomarkers Prev*. 19(3):838-43.

**In each of the examples given, underscored authors are UM trainees mentored by Professor Rozek. In each case, Professor Rozek is the intellectual lead on the publication.*

Service: Professor Rozek has been a highly active member of her academic community within the department and university, as well as more widely. Specifically, she has had a significant impact within the department in her time on the admissions committee and the academic degree program committee, which she has chaired since September 2013. At the school level, Professor Rozek has been an active member of the school-wide research council, and a long-term member of the public health genomics committee. She has also been an active member of the "course busters" initiative established to help some of the school's best educators incorporate teaching innovations into their courses. Professor Rozek is also an executive committee member for two significant departmental research programs: the NIEHS-funded Environmental Epidemiology and Toxicology training grant and the NIEHS P30 Center of Excellence (where she also directs the Environmental Genomics and Epigenomics Core).

Within the broader academic community, Professor Rozek has been active on grant review committees with the National Cancer Institute and the National Institute of Environmental Health Sciences. National and international recognition of her research has resulted in her being invited to serve on over a dozen NIH/NCI Special Emphasis panels for grant review and NIEHS grant review. In addition, Professor Rozek has served as a reviewer for multiple journals, including *Cancer Research*, *Environmental Health Perspectives* and *Cancer Epidemiology, Biomarkers and Prevention.* She has also reviewed research proposals for the State of Florida, Global Cancer Fund and Conquer Cancer Foundation.

Professor Rozek demonstrates a keen and active commitment to serving her local and distributed academic communities, and often takes the initiative to actively support the community – often without formal recognition. She recently instigated on her own initiative a department-wide monthly research seminar, filling a need that had remained unfilled for several years previously.

External Reviewers:
Reviewer (A): "Dr. Rozek has been very creative in her approach to studying cancer including research in epigenetics, and global cancer and special populations. Her research is varied, quite broad, and innovative; and her grant funding attests to her success."

Reviewer (B): "[Her grant funding record] shows not only outstanding funding in her primary research area as well as her integration into some great team science opportunities. In these days and times this represents outstanding validation in terms of grant funding. She looks like a strong scientist who has integrated herself well into your research infrastructure and shows evidence of both the drive and capabilities to maintain her research activity long-term."

Reviewer (C): "[S]he has also demonstrated a unique potential that suggests that with her research expertise and academic influence she will most assuredly continue to make substantial and significant scientific and academic contributions to the fields of cancer etiology, public health and environmental health improvement. She is a shining example of a faculty member who should be promoted and awarded tenure at an institute as well-regarded as the University of Michigan."

Reviewer (D): "I expect she would rank among the top 10% of assistant professors working in this area. This based on the high number of quality publications, her status as a nationally and internationally recognized scholar, and her obvious talents in the classroom where she has received high marks for her creative approaches to teaching."

Reviewer (E): "Dr. Rozek has established herself as a successful independent scholar and teacher in environmental molecular epidemiology and specifically in cancer and epigenomics. Her active, impactful, well-funded research program exemplifies her current level of research success and is indicative of a strongly positive trajectory for future success in multidisciplinary and translational research."

Reviewer (F): "Her research record is excellent for someone at this stage of her career and is a clear marker for an emerging national reputation in her research areas."

Reviewer (G): "She has several important manuscripts in the area [head and neck cancer], including an impressive first to show that HPV-related head and neck cancer is genetically distinct from non-HPV involved tumors. In judging Dr. Rozek's comparability to others who may be at a similar stage in their careers, I would place her in the top 10%."

Reviewer (H): "Prof. Rozek's contribution to research on environmental risk factors for head and neck cancer is particularly valuable and fills a somewhat neglected area of cancer prevention research."

Summary of Recommendation

Professor Rozek represents unique and world-leading expertise within the School of Public Health in her area of research. She is an outstanding researcher and a dedicated teacher. Her productivity has provided research and training opportunities to numerous students. It is with the support of the Executive Committee that I recommend Laura S. Rozek for promotion to associate professor of environmental health sciences, with tenure, Department of Environmental Health Sciences, School of Public Health.

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

James O. Woolliscroft, M.D.
Dean, Medical School

May 2014