

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

Sung Kyun Park, assistant professor of epidemiology, Department of Epidemiology, and assistant professor of environmental health sciences, School of Public Health, is recommended for promotion to associate professor of epidemiology, with tenure, Department of Epidemiology, and associate professor of environmental health sciences, without tenure, Department of Environmental Health Sciences, School of Public Health.

Academic Degrees:

Sc.D.	2005	Harvard School of Public Health, Boston, MA
M.P.H.	2000	Seoul National University School of Public Health, Seoul, Korea
B.S.	1998	Seoul National University, Seoul, Korea

Professional Record:

2010 – Present	Assistant Professor, Departments of Epidemiology and Environmental Health Sciences, University of Michigan School of Public Health
2007 – 2010	Research Assistant Professor, Department of Environmental Health Sciences University of Michigan School of Public Health
2007	Post-Doctoral Fellow, Department of Environmental Health Sciences, University of Michigan
2006	Post-Doctoral Fellow, Department of Environmental Health Sciences, Harvard School of Public Health
2000 – 2001	Occupational Epidemiologist, Wonjin Institute for Occupational and Environmental Health, Seoul, Korea.
2000 – 2001	Research Fellow and Coordinator, Seoul National University, School of Public Health, Seoul, Korea
1999 – 2000	Research Assistant, Catholic Industrial Medical Center, College of Medicine, Catholic University of Korea, Seoul, Korea.

Summary of Evaluation:

Teaching: Professor Park has made important contributions to both our Masters and Ph.D. level courses. At the Masters level, he has developed and currently teaches EPID 675, Data Analysis for Environmental Epidemiology. This course provides students with advanced analytical methods that nicely complement their biostatistics courses; it is one reason why our MPH program has a reputation for teaching students rigorous sophisticated analytical techniques. Professor Park's evaluations have steadily improved since the first time he taught EPID 675. In 2016, he received an impressive 4.75/4.81 Q1/Q2 score with 24 students. He also helped develop a doctoral level analysis course in collaboration with biostatistics colleagues called Modern Statistical Methods in Epidemiology Studies (EPID 815). This course covers emerging novel methods, such as variable selection for big data; spatial epidemiology; longitudinal analysis; gene-environment interaction. Our Ph.D. students have given us highly positive

feedback about this course. Professor Park was recently awarded “The Gilbert Whitaker Fund for the Improvement of Teaching” to continue teaching this course. Again, he received impressive evaluations (4.88/4.56’ Q1/Q2) with a class size of 18.

Research: Professor Park has an impressive record investigating the effects of heavy metals and ambient air pollution on cardio-metabolic and age-related diseases, using epidemiologic methods. More recently, he developed a novel concept of integrating disease risk from multiple pollutants, which is in line with the key strategic goals of the NIEHS current priority. This impressive achievement was recognized in his two recent R01 awards, which he received priority scores at the 5th percentile. Throughout all of his work, what stands out is his biological and statistical sophistication as well as his innovative methodological work.

Professor Park’s publishing record is equally impressive. Since joining the School of Public Health as a research assistant professor, he has published 50 peer-reviewed papers. Since appointment to his current rank (2010-2016), he has published 36 peer-reviewed papers (seven first, one co-first, 11 senior, three second authored; and three invited reviews) as well as two book chapters (one sole author). These works were published in top journals in environmental health [*Environ Health Perspect* (IF=7.98), *Environ Res* (IF=4.37)], epidemiology [*Am J Epidemiol* (IF=5.23), *Epidemiology* (IF=6.2)], and clinical [*Am J Clin Nutr* (IF=6.77), *Diab Metab Res Rev* (IF=3.55)]. Recognizing his expertise in assessing health effects of multi-pollutants, Professor Park was invited as a speaker/panel discussant for the NIEHS Workshop on Statistical Approaches for Assessing Health Effects of Environmental Chemical Mixtures in Epidemiology Studies (2015).

Given Professor Park’s work on environmental pollutants and diabetes, he was invited to present on air pollution and risk of type-2 diabetes at the 73rd Scientific Sessions of the American Diabetes Association (2013). He was also invited as a speaker/panel discussant for the NIEHS Workshop on Statistical Approaches for Assessing Health Effects of Environmental Chemical Mixtures in Epidemiology Studies (2015). He has presented seminars at the University of Michigan (Kresge Hearing Research Institute, UM NIEHS P30 Center, epidemiology departmental seminar, EHS departmental seminar), Purdue University (School of Health Sciences), and University of Sao Paulo (School of Public Health).

Recent and Significant Publications:

Park SK, Peng Q, Bielak LF, Silver KD, Peyser PA, Mitchell BD. (2016) Urinary arsenic and measures of insulin sensitivity and β -cell function in non-diabetic Amish adults. *Diabetes Metab Res Rev*, 32(6):565-71. PMID: 26663816, PMCID: PMC4995145.

Park SK, Adar SD, O’Neill MS, Auchincloss AH, Szpiro A, Bertoni AG, Navas-Acien A, Kaufman JD, Diez Roux AV. (2015) Long-term exposure to air pollution and type-2 diabetes in a multi-ethnic cohort. *Am J Epidemiol*, 181(5):327-36. PMID: 25693777, PMCID: PMC4339386.

Jhun A, Hu H, Schwartz J, Weisskopf MG, Nie LH, Sparrow D, Vokonas PS, Park SK. (2015) Effect modification by vitamin D receptor genetic polymorphisms in the association between cumulative lead exposure and pulse pressure: A longitudinal study. *Environ Health*, 14:5 PMID: 25582168, PMCID: PMC4417283.

Park SK, Tao Y, Meeker JD, Harlow SD, Mukherjee B. (2014) Environmental risk score as a new tool to examine multi-pollutants in epidemiologic research: An example from the NHANES study using serum lipid levels. *PLoS One*, 9(6):e98632. PMID: 24901996, PMCID: PMC4047033.

Park SK, Elmarsafawy S, Mukherjee B, Spiro A III, Vokonas PS, Nie H, Weisskopf MG, Schwartz J, Hu H. (2010) Cumulative Lead Exposure and Age-related Hearing Loss: The VA Normative Aging Study. *Hearing Research*, 269(1-2):48-55. PMID: 20638461. PMCID: PMC2934752.

Service: Professor Park's expertise is widely recognized and has resulted in him serving on a National Research Council (NRC) Committee on potential health risks to Department of Defense firing-range personnel from recurrent lead exposure (2012-13), as well as on a NIH study section as an ad hoc member for both IRAP (June 2016) and a Special Emphasis panel. Professor Park is a member of the Scientific Program Committee on the 27th International Society for Environmental Epidemiology (ISEE) annual conference and is on the editorial board for the *J Environ Health Sci* (since 2008) and *J Prev Med Public Health* (since 2010). He has served as a peer reviewer for several journals in the areas of epidemiology (*Am J Epidemiol*, *Epidemiology*), environmental health and toxicology (*Environ Health Perspect*, *Environ Res*, *Environ Health*, *Occup Environ Med*, *Environ Sci Technol*, *Inhal Tox*, *Toxicol Lett*), medicine (*Diabetes Care*, *Am J Resp Crit Care Med*), and multidisciplinary (*Plos One*).

At the school or university level, Professor Park is the co-director of the OEE Program in the Center for Occupational Health and Safety Engineering; an executive committee member of the T32 training grant in public health and aging; co-I of the Integrated Health Science Core in the Michigan Lifestage Environmental Exposures and Disease Center (M-LEEaD); faculty mentor for the T32 training grant in Environmental Toxicology and Epidemiology (EETEP); a member of the Midlife Science Center, Michigan Center for Diabetes Translational Research (MCDTR), Michigan Nutrition Obesity Research Center; and a delegate for the scholar exchange program with Universidade de São Paulo Faculdade de Saúde Pública (USP-FSP). He has coordinated the biweekly environmental epidemiology seminar series since 2014.

External Reviewers:

Reviewer A: "Dr. Park recently developed a new concept of integrating disease risk from multiple pollutants, which is in line with the key strategic goals of the NIEHS. Dr. Park is a national leader and is also known internationally. [He] has shown high quality research; his progress is impressive in breadth and depth. I consider the article 'Heavy Metals and Aging Outcomes' to be outstanding since this is an area which will become increasingly important in the future."

Reviewer B: "Dr. Park's scholarly output has been extremely solid...worked on a wide set of environmental exposures. His [*PLoS One*] paper is extremely innovative in tackling one of the most pressing problems in the field on environmental health sciences, i.e., the consequences of exposures to mixtures of chemicals. His service to our discipline has been outstanding. I enthusiastically support the proposed promotion."

Reviewer C: “I am very impressed with Dr. Park’s ability to secure federal funding. He recently received very favorable reviews and scores on two RO1 grants for which he is the principal investigator. His focus on reproductive aging and metabolic disorders and obesity are high priorities at NIEH. Dr. Park is well published and has published in some of the highest impact journals. [He] has an impressive record on his resume of mentoring students and post-docs.”

Reviewer D: “Dr Park has a very accomplished record as an environmental epidemiologist and is highly regarded in the field. The content of the research also demonstrates excellent collaboration and resourcefulness. [His] level of peer review, along with his service on grant review committees with NIH, demonstrates the high regard that he holds among his peers and his professionalism as a colleague.”

Reviewer E: “The impression that comes across is a broadly knowledgeable and experienced environmental epidemiologist who has developed sufficient areas of concentration to make notable contributions in several distinct areas in a relatively short period of time. He deserves credit in particular for pinpointing some important and understudied areas of investigation... has identified important understudied topics and made notable contribution. I am confident that his record would qualify him for promotion to Associate Professor with Tenure at [my institution].”

Reviewer F: “I do not consider Dr. Park’s broad interests and areas of investigation to reflect a lack of focus, I consider it an important strength. Dr. Park regularly mentors doctoral and masters students and he has written many papers with his students... He is diligent, responsive, productive, and responsible...an outstanding collaborator and colleague. I support Dr. Park’s promotion to associate professor with tenure with the highest enthusiasm and without reservation.”

Summary of Recommendation:

Professor Park is an innovative and dedicated teacher, as well as an outstanding researcher in his field. With the support of the Executive Committee, I am pleased to recommend the promotion of Sung Kyun Park to associate professor of epidemiology, with tenure, Department of Epidemiology, and associate professor of environmental health sciences, without tenure, Department of Environmental Health Sciences, School of Public Health.



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

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