

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

Richard L. Neitzel, associate professor of environmental health sciences, with tenure, Department of Environmental Health Sciences, and associate professor of global public health, without tenure, School of Public Health, is recommended for promotion to professor of environmental health sciences, with tenure, Department of Environmental Health Sciences, and professor of global public health, without tenure, School of Public Health.

Academic Degrees:

Ph.D.	2009	University of Washington
M.S.	1998	University of Washington
B.S.	1996	University of Southern California

Professional Record:

2020-Present	Associate Director, Global Health, University of Michigan School of Public Health
2018-Present	Associate Professor, Global Health, University of Michigan School of Public Health
2016-2020	Associate Chair, Environmental Health Sciences, University of Michigan School of Public Health
2016-Present	Associate Professor, Department of Environmental Health Sciences, University of Michigan School of Public Health
2012-Present	Visiting Researcher, Environmental and Occupational Medicine, Sahlgrenska University Hospital, University of Goteborg
2011-2016	Assistant Professor, Department of Environmental Health Sciences, University of Michigan School of Public Health
2011-2012	Visiting Researcher, Karolinska Institute
2008-2011	Research Consultant, Columbia University Department of Sociomedical Sciences
2000-2011	Research Scientist, Department of Environmental and Occupational Health Sciences, University of Washington
1998-2000	Research Industrial Hygienist, Department of Environmental and Occupational Health Sciences, University of Washington

Summary of Evaluation:

Teaching – Professor Neitzel spearheaded the development of the new Environmental Health Promotion and Policy master of public health (MPH) program in the School of Public Health. This program aims to meet present and future needs for environmental health policy and promotion efforts necessary to improve public health by mitigating hazard exposure in communities and workplaces. It is attracting new master's students to the Department of Environmental Health Sciences who are interested in careers in government agencies, nongovernmental organizations, consulting firms, and industry. Professor Neitzel's teaching is

exemplary as evidenced from his teaching evaluations. He has taught seven courses (six residential, one online) including EHS 500 (Principles of Environmental Health Science), EHS 581 (Principles of Radiation), EHS 601 (Exposure Science and Health), EHS 655 (Human Exposure Analysis), EHS 658 (Physical Hazards), EHS 796 (E-waste and Health) and PublicHealth 514 (Public Health Sciences and the Environment). Since 2016, he has been the instructor for 17 classes. Student ratings for his classes have been excellent, with 13 of the 17 Q1 scores being above 4.6 and 15 of the 17 classes being above 4.8 for the Q2 scores. In 2017, he received the School of Public Health Excellence in Teaching Award. Professor Neitzel has chaired or co-chaired four doctoral student committees and three master's student thesis committees, and mentored numerous MPH and undergraduate students. He has co-authored 20 in rank publications with trainees as co-authors.

Research – Professor Neitzel's research centers on two broad interconnected themes. The first theme is exploring emerging noise-related issues, including the relationship between noise exposures and adverse hearing and cardiovascular outcomes, as well as potential interactions between noise and other hazards, such as chemical inhalation or ingestion exposures. The second theme is characterizing and preventing occupational and environmental injury risk factors. He is especially interested in developing methods that allow for holistic exposure assessment and for exposure measurement via consumer devices (e.g., crowd-sourced data collection). Professor Neitzel has conducted his research in various settings including emerging and traditional work environments. His work on the characterization of noise exposures and auditory and non-auditory health impacts has incorporated innovative, crowd-sourced data collection approaches using cutting-edge consumer technology in combination with "big data" analytical methods. Much of Professor Neitzel's research has led to actionable guidance for worksites and surrounding communities. For example, his field research on the impacts of electronic waste recycling has had direct and meaningful impacts on e-waste recycling practices in the study communities.

During his tenure as associate professor at the School of Public Health, Professor Neitzel has been awarded as principal investigator (PI) or co-PI two foundation grants, one large external grant from Apple Inc. and one Centers for Disease Control and Prevention (CDC) contract. The grant from Apple Inc. is regarded as particularly innovative and important as it will be collecting data on noise levels from mobile devices and relating them to the person's health for the first-time. He also serves as a co-investigator on a National Institute for Occupational Safety and Health (NIOSH) R01 and in a leadership role on the NIOSH Educational Research Center (ERC) at the University of Michigan. Professor Neitzel currently has two pending National Institutes of Health (NIH) grants, a R01 and a R21, which were recently reviewed and received excellent scores (7th and 9th percentile). If funded, these grants will facilitate his on-going and future research in the health effects of noise. Professor Neitzel has 110 peer-reviewed papers, 50 of which have been since appointment as associate professor. Of the 50, he has been first author on five and second or senior author on 35. The majority of his papers are published in leading journals including the *Journal of Occupational and Environmental Hygiene*, *Noise and Health*, *American Industrial Hygiene Association Journal*, *Occupational and Environmental Medicine*, the *American Journal of Industrial Medicine*, and the *American Journal of Public Health*. Professor Neitzel has also co-authored two book chapters and authored two technical reports for the World Health Organization while in rank. Since 2016, he has been invited to speak at five

national and international meetings and in 2019, he received the Outstanding Lecture Award from the National Hearing Conservation Association. His work regularly receives media attention and has been featured on numerous media outlets including the CBC, *New York Times*, MSNBC, *Washington Post*, *Chicago Tribune*, *Consumer Reports*, *Detroit Free Press*, Reuters, Associated Press, and Michigan and Arizona Public Radio.

Recent and Significant Publications:

- Sayler, S.K., Roberts, B.T., Manning, M.T., Sun, K., Neitzel, R.L. (2018) Patterns and Trends in OSHA Occupational Noise Exposure Measurements from 1979 to 2013. *Occupational and Environmental Medicine*. 2019;76:118–124.
- Sayler, S.K., Rabinowitz, P.M., Galusha, D.H., Sun, K., Neitzel, R.L. (2018) Hearing Protector Attenuation and Noise Exposure Among Metal Manufacturing Workers. *Ear and Hearing*. 40(3):680-689. PMC6395583.
- Roberts, B.T., Cheng, W.T., Mukherjee, B., Neitzel, R.L. (2018) Imputation of Missing Values in a Large Job Exposure Matrix using Hierarchical Information. *Journal of Exposure Science and Environmental Epidemiology*. 28(6):615-648.
- Araín, A.L., Pummill, R.T., Adu-Brimpong, J.T., Becker, S.T., Green, M.T., Ilardi, M.T., van Dam, E.T., Neitzel, R.L. (2020) Analysis of e-waste recycling behavior based on survey at a Midwestern US University. *Waste Management*. 105 119–127.
- Neitzel, R.L., Sayler, S.K., Demond, A.H., d’Arcy, H., Garabrant, D.H., Franzblau, A. (2020) Measurement of Asbestos Emissions Associated with Demolition of Abandoned Residential Dwellings. *Science of the Total Environment*. 722 137891. doi: 10.1016/j.scitotenv.2020.137891.

Service – Professor Neitzel has been very active in service, both within and outside the university. The quantity of this service is more than would be typical for an associate professor. His service within the department and school has included being an associate chair in the Department of Environmental Health Sciences from 2016 through 2020, leading the curriculum committee, being the associate director of the NIOSH Educational Research Center, and the associate director of University of Michigan Office of Global Public Health. At the university level, Professor Neitzel served on the University of Michigan President’s Advisory Committee on Labor Standards and Human Rights and currently serves on the University of Michigan School of Public Health COVID-19 Task Force for the Governor’s Michigan Economic Recovery Council. Externally, Professor Neitzel has been active in refereeing papers and reviewing grants. He has also served on governmental committees including as chair of the American Conference of Governmental Industrial Hygienists Threshold Limit Values (TLV) Physical Agents Committee, as well as a consultant to the World Health Organization (WHO) Make Listening Safe initiative and the CDC’s Public Noise Exposure Guideline project. Being chair of the TLV Committee is a noteworthy distinction as this committee sets the standards for safe levels of agents, which are then used nationally and internationally.

External Reviewers:

Reviewer A: “He is a highly productive scientist who is working in some critical areas of occupational health. Dr. Neitzel has developed an impressive and sustainable program in scholarly research related to hearing loss and other topics.... I find his research related to the impact of noise on health, including hearing loss and other outcomes, as particularly impactful.”

Reviewer B: “I believe that Dr. Neitzel’s research program, funding, and publications meet or exceed the criteria for promotion to Professor.”

Reviewer C: “Over half of his publications and grants are on sound and hearing and he is certainly a leader in that area. He has diversified to other research areas including the important one of electronic waste so that he has acquired multidisciplinary and interdisciplinary perspectives. His global public health appointment and activities further reinforce this.”

Reviewer D: “His scholarly contributions to the field are numerous and outstanding... Dr. Neitzel is a leader, both nationally and internationally, within the field of exposure science... Dr. Neitzel is one of the most productive, accomplished, and successful scientists in our field.”

Reviewer E: “Since his last promotion, only 4 years ago, Dr. Neitzel’s has maintained, and expand, exceptional scholarly activities in each possible dimension assessed: scientific pertinence, originality, quality of publications, number of publications and usefulness to other scientists both at national and international levels. His publications are in highly regarded peer-reviewed journals... Dr. Neitzel ranks among the scientific leaders in the field of noise and its effects in the USA and at the international level. There is no doubt that Dr. Neitzel will continue to contribute to this field while exploiting his unique expertise to the broader domain of public health to help solve globally emerging issues.”

Reviewer F: “Dr. Neitzel is an internationally recognized and highly respected scholar in the fields of industrial hygiene, exposure science, and occupational health, particularly so due to his outstanding research and publications on noise exposures. He has brought recognition and success to the Department, School, and the University of Michigan.”

Reviewer G: “Dr. Neitzel’s scholarly work is impressive. He has published 48 articles in peer-reviewed journals as an associate professor. The articles I reviewed are of high quality and widely cited. Dr. Neitzel has established clear focus areas within the fields of noise, injury, and eWaste that are well-defined, productive, and important. He has garnered substantial funding to support these efforts, growing his laboratory and productivity.”

Reviewer H: “Dr. Neitzel’s research productivity continues to be above average for someone at his rank and step. ... His publications are in a variety of journals that include some of the premier journals in the field of occupational health including AIHAJ, OEM, AJIM and AJPH. One of the general criteria for promotion to Full Professor is having an international reputation, and Dr. Neitzel has ample evidence of this in his academic record. This includes international research collaborations and co-authorships, presentations at international meetings, and funding from international sources. I am impressed by the creativity of Dr. Neitzel’s current research, such as his funded research from Apple Corporation to do large scale assessment of noise exposure and hearing using cell phone technology.”

Summary of Recommendation:

Professor Neitzel’s characterization of noise exposures and auditory and non-auditory health impacts has made him a leader in the field of exposure science both nationally and

internationally. He has an outstanding record of teaching and mentorship and has been instrumental in the development of the new Environmental Health Promotion and Policy master of public health program in the Department of Environmental Health Sciences. His service within the department, school, and broader environmental health sciences community has exceeded that of a typical associate professor. It is with the support of the School of Public Health Executive Committee that we recommend Richard L. Neitzel for promotion to professor of environmental health sciences, with tenure, Department of Environmental Health Sciences, and professor of global public health, without tenure, School of Public Health.

A handwritten signature in black ink, appearing to read "F. DuBois Bowman". The signature is fluid and cursive, with the first name "F." being more prominent.

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

May 2021