PROMOTION RECOMMENDATION The University of Michigan School of Nursing

Marjorie E. McCullagh, associate professor of nursing, with tenure, School of Nursing, is recommended for promotion to professor of nursing, with tenure, School of Nursing.

Academic Degrees:

PhD	1999	University of Michigan, Nursing, Ann Arbor, MI
MS	1986	University of North Dakota, Nursing, Grand Forks, ND
BS	1977	State University of New York at Albany, Nursing, Albany, NY

Professional Record:

2012 - Present	Associate Professor, School of Nursing, University of Michigan
2008 - 2012	Assistant Professor, School of Nursing, University of Michigan
2004 - 2008	Associate Professor, North Dakota State University
1986 - 2004	Assistant Professor, North Dakota State University

Summary of Evaluation:

Teaching:

Professor McCullagh is an experienced educator teaching nursing courses at the undergraduate and graduate levels, in both didactic and clinical settings. At the national level, Professor McCullagh is a leader in occupational health nursing (OHN), which is usually embedded within interdisciplinary and interprofessional training programs. She directs the nursing component of the Centers for Disease Control and Prevention (CDC)/the National Institute for Occupational Safety and Health (NIOSH) funded UM Center for Occupational Health, Safety, and Engineering and oversees the training of a cadre of nursing graduate students supported by this mechanism. Professor McCullagh employs a variety of teaching-learning methods, including case study analyses, videos, gaming, and web-based technologies in both face-to-face and distance learning format. Course teaching focuses on public health nursing (e.g., population-focused assessment), core graduate nursing curriculum (e.g., nursing theory in advanced practice), and specialtyfocused (e.g., issues in occupational health nursing). Since 2012, Professor McCullagh has taught N686 a lecture and lab four times; N563 lecture and lab twice, N572 lecture once; and N536 as a lecture once (Second Career Program; team taught). Most of these courses are at the graduate level with class sizes varying from 56 to 4 students. She frequently teaches seminars to graduate students.

Professor McCullagh has solid experience in successfully mentoring master's, doctorate of nursing practice and PhD students, post-doctoral research fellows, and visiting scholars. She has co-chaired the preliminary exam and dissertation of two PhD students. She has or currently is advising or co-advising 34 master's students. As noted, she has published with her master's students, and one of her students received the University Presidential Internship in Cambodia (Summer 2015). Professor McCullagh has been instrumental in mentoring a previous post-doctoral research fellow resulting in publication of six papers. She has mentored students to

complete coursework required for the U.S. Department of Transportation Medical Examiners certification. She is also active in mentoring faculty within the school by serving as a senior co-investigator on a junior faculty colleague's recently funded R01.

Professor McCullagh collaborates with the School of Public Health and the College of Engineering on a T42 training program in occupational health, one of 17 in the country that is funded by the Centers for Disease Control and Prevention (CDC)/the National Institute for Occupational Safety and Health (NIOSH). Professor McCullagh serves as the director of the occupational health nursing track of this program. Since 2012, Professor McCullagh has graduated 16 nursing students in this specialty that is a shortage area in nursing. Because there are few programs like this in the country, students come from across the country to attend the primarily web-blended curriculum at UM. Professor McCullagh's director role has required significant negotiation with clinical sites and other universities to provide courses and clinical experiences for students enrolled in the specialty. Professor McCullagh has been instrumental in the success of the long-standing CDC/NIOSH funded training program in occupational health and it is to her credit that the UM has a strong presence in the public health field of occupational health nursing.

Research:

Professor McCullagh's program of research focuses on promoting the health and safety of farm workers with an emphasis in hearing protection. She has cultivated a long-standing relationship with agricultural workers through government agencies, advocacy groups and commodity groups. Professor McCullagh's program of research follows ideals of building a trajectory in a focused arena from exploratory to observational to intervention research, organized with theoretical framing. Up to this point she has worked primarily as a solo investigator applying standard methods which provides an evidence base for ways to improve farmers' hearing outcomes across the lifespan. The contribution is clinically relevant and important.

Professor McCullagh's track record of consistent success at garnering research funding from a wide range of sources is impressive and has led to repeat R01 funding from the National Institutes of Health (NIH)/the National Institute of Deafness and Other Communication Disorders (NIDCD) for a second clinical trial in her program of research. She has recently completed an R01 funded by NIH on testing a web-based intervention to promote hearing in farm workers. She now has an R01 funded by NIH to extend this work to farm youth. She is also a co-investigator (Co-I) on three other funded studies. She is also involved in several smaller grants, including one from the U-M Center from Occupational Health, Safety, and Engineering (Co-I) and two with a post-doctoral research fellow. In addition, she has been involved in two training grants from the Michigan Education and Research Center and has received in-kind support from commercial sources (e.g., 3M, Honeywell/Howard Leight).

Professor McCullagh's research program trajectory is commendable including instrument development and testing, pilot work, and small grants that have led to her R01 funding. She has unequivocally advanced the frontier of knowledge with respect to recruitment of hard to reach populations (agricultural workers) and hearing conservation as exemplified in her publications. Professor McCullagh has produced reports from each funded project in journals that are appropriate for the type of study being reported. Since 2011, Professor McCullagh has had 24

peer reviewed publications, 12 as first author. She has published several papers with her students and the junior faculty she has mentored. Professor McCullagh's publications are in a variety of journals (both nursing and non-nursing journals) in her specialty area including *Noise* and Health and Workplace Health and Safety as well as those reaching a broader audience Journal of Pain and Symptom Management, Journal of Advanced Nursing and BioMed Central (BMC) Public Health. She has published in journals with high impact factors such as BMJ Quality and Safety (3.28) and BMC Public Health (2.32). Her total bibliography of peerreviewed papers includes 36 that have been cited 138 times. The impact of her scholarship is evidenced by the number of media presentations she has done since 2012, totaling over 30.

Recent and Significant Publications:

- Friese, C., McArdle, C., Zhau, T., Sun, D., Spasojevic, I., Polovich, M., McCullagh, M. (2015). Antineoplastic drug exposure in an ambulatory oncology setting. *Cancer Nursing* 2015, 38 (2), 111–117.
- McCullagh, M., Rosemberg, M.A. & Foley, J. (2015). Cultural health practices of migrant seasonal farmworkers in Michigan. *Journal of Cultural Diversity* 2015, 22(2), 64-67.
- Rosemberg, M.A., McCullagh, M., Norstrom, M. (2015). Farm and rural adolescents' perspectives on hearing conservation: Results of a focus group study. *Noise and Health Noise and Health* 2015, 17(76), 134-140.
- McCullagh, M., Sanon, M.A., Cohen, M. (2014). Strategies to enhance recruitment and retention in research involving a community-based population. *Applied Nursing Research* 2014, 27(4), 249-53.
- McCullagh, M. (2012). Occupational health nursing education for the 21st century. *Workplace* Safety and Health 2012, 60(4), 167-76.

Service:

Professor McCullagh's continued record of academic, professional and community service is admirable. She served as elected chair of the Academic Admissions and Scholastic Standing Committee (CAASS) (2013-2015), and was a faculty mentor for the Global Ambassadors PhD Summer Research Institute. She has been instrumental in developing the population health emphasis area for our newly revised Master's Program.

At the university level, Professor McCullagh's service includes director of the Center for Occupational Health, Safety and Engineering (COHSE). In this role, Professor McCullagh engages national speakers for the seminar series, directs the occupational health nursing component of the T42 training grant, and assures that appropriate courses are available for nursing students in occupational health. She is a charter member of the University of Michigan Health Systems Nursing Health and Safety Council, and has consulted with the senior director of university health and well-being initiatives. She has served on the Faculty Senate for the university.

Service to the profession includes her role as the director of education for the National Hearing and Conservation Association, an elected position in a society of primarily audiologists; and national leadership for curriculum development in occupational health for the American Association of Occupational Health Nurses. Her community service for several decades has included disaster response work for the Red Cross and the Public Health Emergency Reserve, as well as frequent advocacy in the political and policy realm related to worker health and safety.

External Reviewers:

Reviewer A: "Certainly, her success in securing her second R01 (to test hearing health education for farm and rural youth) suggests her productivity and prominence in the field of hearing health."

Reviewer B: "The University of Michigan is fortunate to have an occupational health nursing leader and scientist of Dr. McCullagh's caliber. She has achieved a highly focused and consistently funded program of research with robust publications..."

Reviewer C: "[Professor] McCullagh's body of work reveals a very thoughtful approach to investigating the issues of hearing health and hearing protector use among farmers and farm workers. Her research addresses a significant issue – prevention of hearing loss in farmers and farm workers."

Reviewer D: "[Professor] McCullagh's research portfolio is robust and attests to her significant and continued scientific contributions. She has been constantly funded..."

Reviewer E: "Her work is of high quality and seeing students on her publications and presentations provides evidence that [Professor] McCullagh successfully mentors graduate students and is dedicated to bringing new nurse researchers into occupational health."

Summary of Recommendation:

Professor McCullagh is recognized as a prominent and productive scientist who has made significant contributions to promoting the health and safety of farm workers with an emphasis in hearing protection. She is successful as an independent researcher whose program of research focuses on prevention of noise-induced hearing loss among farm operators and farm and rural youth, particularly through use of hearing protection devices. Her work has achieved national and international notice. Professor McCullagh has a solid record of academic, professional and community service. She is an admirable teacher and mentor. It is with the support of the School of Nursing Executive Committee that I recommend Marjorie E. McCullagh for promotion to professor of nursing, with tenure, School of Nursing.

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Kathleen Potempa Dean, School of Nursing

May 2016