PROMOTION RECOMMENDATION The University of Michigan-Flint School of Nursing

Barbara J. Kupferschmid, assistant professor of nursing, School of Nursing, is recommended for promotion to associate professor of nursing, with tenure, School of Nursing.

Academic Degrees:

Ph.D.	2007	University of Michigan, Ann Arbor, Michigan
M.S.N.	1985	Wayne State University, Detroit, Michigan
B.A.	1980	Aquinas College, Grand Rapids, Michigan
A.D.N.	1974	University of Evansville, Evansville, Indiana

Professional Record:

2010-present	Assistant Professor	of Nursing, School	of Nursing, U	Jniversity of
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Michigan-Flint, Flint, Michigan

2009 Instructor of Nursing, College of Nursing, Michigan State University,

Lansing, Michigan

2009 Intermittent Lecturer, School of Nursing, University of Michigan, Ann

Arbor, Michigan

Summary of Evaluation:

<u>Teaching</u>: Since her initial appointment in 2010, Professor Kupferschmid has demonstrated continued progress toward excellence in teaching, curriculum review and development, and the scholarship of teaching. Her efforts have been favorably received as demonstrated by positive student evaluations, peer-reviewed posters and presentations, and publication of an article focused on nursing education. Professor Kupferschmid has taught or co-taught face-to-face and online sections of 15 different courses in the undergraduate and graduate nursing programs. She received Golden Apple awards from her students in 2011 and 2013.

Professor Kupferschmid's strengths in research, neuroscience (specifically spatial learning or wayfinding), and behaviors associated with acute activation of the immune system have significantly influenced her teaching. When Professor Kupferschmid's students told her that they did not know how to read a research article or how the information it contains might apply to their practice, she designed assignments that helped students absorb material they believed initially they could not master such as understanding research methodology, articulating what they learned about the translational research, and applying related research findings to practice. In an undergraduate research course, she described how she used research articles on human endotoxemia models to illustrate the link between the immune system and neuroscience. She also used this technique to explain concepts such as experimental research and statistical analysis methods in both courses.

Since 2012, Professor Kupferschmid has taught nursing research courses in the undergraduate and graduate programs and planned and taught a doctoral-level nursing informatics course. Professor Kupferschmid has progressively received higher scores on student course evaluations over time. She currently co-chairs the School of Nursing (SON) Graduate Curriculum Committee and recently worked with the committee co-chairperson and the director of graduate nursing affairs to revise the curricula of several programs.

Research and Scholarship: Professor Kupferschmid has significant accomplishments in the Scholarship of Discovery, the Scholarship of Teaching, and the Scholarship of Integration since her appointment at UM-Flint in 2010 and in prior positions. She has a cutting edge program of basic research that focuses on behaviors associated with acute immune system activation. This research evolved out of her critical care nursing background and interest in psychoneuroimmunology. Professor Kupferschmid has moved her research forward with work done in an animal laboratory on the UM-Flint campus using funding from the Department of Nursing in 2011 and a Thompson Center for Learning and Teaching Center Research and Creative Activity Award in 2013.

In addition to her peer-reviewed publications, Professor Kupferschmid also presented her research titled "Cognitive and behavioral responses to lipopolysaccharide in aged rats" in 2016 at the Gerontological Society of America Annual Scientific Meeting in New Orleans, Louisiana, and "Characterization of spatial learning and sickness responses in aging rats following repeated administration of lipopolysaccharide" in 2012 at the Society for Neuroscience (SfN) 42nd Annual Meeting in New Orleans. Another line of research that has resulted in a publication in a peer-reviewed journal and many scholarly presentations is within the Scholarship of Teaching. Professor Kupferschmid explains that, although she has primarily studied her area of research (learning and memory) in animals, she is also interested in student learning and applying her research to this field. Professor Kupferschmid also identified how her research with animals fits within Boyer's Scholarship of Integration by including students from other disciplines, including biology and psychology, in her investigations through the Undergraduate Research Opportunity Program (UROP) and Graduate Student Research Assistant (GSRA) positions. These students worked directly in the laboratory with her and also in initiating the new study with human subjects.

Recent and Significant Publications:

Kupferschmid, B. J., Therrien, B., & Rowsey, P. J. (2017). Effects of low-dose lipopolysaccharide and age on spatial learning in different Morris water maze protocols. *SAGE Open Medicine*, *5*, 2050312117729112. doi:10.1177/2050312117729112

Kupferschmid, B., Creech, C., Lesley, M., Filter, M., & Aplin-Kalisz, C. (2017). Evaluation of Doctor of Nursing Practice students' competencies in an online informatics course. *Journal of Nursing Education*, 56(6), 364-367. doi:10.3928/01484834-20170518-09

Kupferschmid, B. J., & Therrien, B. A. (2017). Spatial learning responses to lipopolysaccharide in adult and aged rats. *Biological Research for Nursing*. Advance online publication. doi:10.1177/1099800417726875

- Kupferschmid, B. J., Therrien, B., & Rowsey, P. J. (in press). Different sickness responses in adult and aged rats following lipopolysaccharide administration. *Biological Research for Nursing*. (In press)
- Culver, M., Nagi. R., Kupferschmid, B., & McFarland, M. (2017). *Implementation of guidelines for persistent pain management in the elderly*. Manuscript submitted for publication. (In review)
- Kupferschmid, B., and Therrien, B. (2004, February). *Behavioral responses to lipopolysaccharide in Brown-Norway rats*. Paper presentation at Midwest Nursing Research Society, St. Louis, MO.

Service: Professor Kupferschmid has provided service to the community, profession, department, SON, and UM-Flint. In doing so, she contributed her knowledge and or expertise at various levels to further the work of the university and served on committees related to her expertise. She has concentrated her service primarily at the department, school, and university levels and in recent years engaged in service to the profession and community. Professor Kupferschmid served on two university committees: the Scholarships, Awards, and Events Committee and the Research and Creative Activity (RCA) Committee. She served as a representative to the Senate Assembly and was a grant reviewer for the IP-X research grants that are administered across University of Michigan schools. Consistent with her interest in aging and neuroscience, Professor Kupferschmid participated in the volunteer training program at the Alzheimer's Association Michigan Great Lakes Chapter, which prepares community volunteers to teach specific lectures developed by the national association. These lectures are conducted at various community venues such as senior centers or libraries.

External Reviewers:

Reviewer A: "The totality of this work demonstrates that Dr. Kupferschmid has a command of scholarship and is able to use a variety of methodological strategies."

Reviewer B: "She has a research trajectory on bio-behavioral research starting in a pre-doctoral fellowship through her doctoral work which continues in her current research."

Reviewer C: "Dr. Kupferschmid has produced quality work in her area of research ... and describes her research as being 'important in understanding human responses to infection,' however, he indicated that she 'shows no evidence of pursuing extramural funding."

Reviewer D: "Although there are some nurse-physiologists with formal academic preparation and hands-on laboratory experience who engage in animal model research nationally, this is a relatively small and elite group of serious-minded, dedicated, and committed animal model nurse-scholars. Dr. Kupferschmid's publications demonstrate that she has the knowledge and skill in this type of research."

Reviewer E: "Over 2016 and 2017 Dr. Kupferschmid has had eight poster presentations accepted (three to be presented after this writing). From these efforts it appears that

Dr. Kupferschmid has two foci in her scholarly program: Spatial learning responses and sickness responses in aged rats following Lipopolysaccharide administration; and Doctorate of Nursing Practice (DNP) student competencies."

Reviewer F: "Current publications focus on important problems/issues."

Reviewer G: "Overall, I do believe Dr. Kupferschmid shows promise at the rank of Associate Professor."

Summary of Recommendation: Professor Kupferschmid is an effective teacher and serious-minded scholar whose rigorous, cutting-edge animal model and human research focus is biobehavioral, with emphasis on the behaviors associated with alterations in biological functioning after acute activation of the immune system. The goal of her research is to more thoroughly understand the implications of acute infections in the elderly. She actively engages with members of the community, especially on topics associated with the intersection of neuroscience and aging. I am pleased to recommend Barbara J. Kupferschmid for promotion to associate professor of nursing, with tenure, School of Nursing.

Recommended by:

Margaret M. Andrews, PhD, RN, CTN-A, FAAN

Interim Dean and Professor of Nursing

School of Nursing

Recommendation endorsed by:

Douglas G. Knerr, Provost and

Vice Chancellor for Academic Affairs

Susan E. Borrego, Chancellor

University of Michigan-Flint