

PROMOTION RECOMMENDATION  
The University of Michigan  
School of Nursing

Janis M. Miller, assistant professor of nursing, School of Nursing, is recommended for promotion to associate professor of nursing, with tenure, School of Nursing [also being promoted to research associate professor, Department of Obstetrics and Gynecology, Medical School].

Academic Degrees:

PhD	1996	University of Michigan, Nursing, Ann Arbor, MI
MSN	1987	Loyola University, Nursing, Chicago, IL
BSN	1981	Goshen College, Nursing, Goshen, IN

Professional Record:

2007 – present	Assistant Professor, School of Nursing, University of Michigan
2007 – 2007	Research Associate Professor, School of Nursing, University of Michigan
2003 – present	Research Assistant Professor, Obstetrics and Gynecology Department, University of Michigan
2001 – 2006	Assistant Research Scientist, School of Nursing, University of Michigan
1999 – 2003	Research Investigator, Obstetrics and Gynecology Department, University of Michigan
1998 – 1999	Lecturer, School of Nursing, University of Michigan
1996 – 1999	Post-Doc, Institute of Gerontology, University of Michigan
1988 – 1990	Instructor, School of Nursing, University of Louisville

Summary of Evaluation:

Teaching: Since 2007, Professor Miller has maintained a teaching load appropriate for her rank. She has taught N603, Data Management, Analysis and Representation for Advanced Practice in Nursing (2 credit hours) and N543 Pathophysiology (3 credit hours) since 2007. Her students ranked her consistently in the 4.1 – 4.8 out of 5 range for N603 and 3.0 to 4.9 for Pathophysiology. It is important to note that her evaluation scores for N543 have consistently improved as she has taught the course.

Professor Miller has been invited as a guest lecturer in N566, EPID550, WS605 as well as for the Medical School and the Dean's Research Day. She also has given two extramural teaching presentations at the Wound Ostomy Continence Society Regional Conference and at the International Continence Society Annual Conference. In addition, Professor Miller has had faculty responsibilities in the Institutional Program of Female Pelvic Medicine and Reconstructive Surgery since 2003.

Professor Miller has had extensive interactions with students as an advisor. Since 2007, Professor Miller has been a research experience instructor for two students, member of one internal and one external dissertation committee (both of which won awards), advisor and chair of two current preliminary committees and one doctoral planning committee chair. She has been an advisor for five thesis or N699 projects, one of which won the Dorothy Booth Research Scholarship Award. She has advised five UROP or undergraduate students.

In addition to her work with students, she has mentored or collaborated with 11 international fellows and has mentored three junior faculty. Each of the collaborations with the international fellows resulted in a

co-authored manuscript or poster presentation. The results of her faculty mentoring include a book chapter collaboration, several manuscript collaborations, and a K award for one faculty member.

Research: Professor Miller is a member of a well-established interdisciplinary research team in the Department of Obstetrics and Gynecology in the Medical School whose focus is on pelvic floor problems associated with labor and delivery. Professor Miller's unique contributions to this program of research focus on three main topical areas including: 1) mechanisms linking injury during childbirth to pelvic floor prolapse and urinary incontinence in later adulthood, 2) development and testing of an intervention to reduce pronounced stress or urge urinary incontinence, and 3) overactive bladder syndrome and the effects of fluid volume and type on overactive urinary patterns in adult women. In each of these areas, Professor Miller is recognized as having made significant contributions that have important practical clinical implications.

In the area of birth injury as a determinant of pelvic floor prolapse, Professor Miller used fMRI technology to show that injury of pelvic muscles, including rupture of the muscle fibers from the pelvic bone, occurs during childbirth and may serve as a critical precursor to prolapse and incontinence. This work is noted as particularly important because it draws into question the current practice of pelvic floor exercise as a treatment for urinary incontinence. The second major focus in Professor Miller's research is on an intervention for urinary incontinence that she developed as part of her dissertation study, the KNACK maneuver. This intervention is based on an innovative theoretical formulation that challenged the logic of the Kegel muscle exercise that has been considered a standard intervention practice. In a series of follow-up publications she has shown that a single purposeful contraction of the pelvic musculature at the time of leakage can reduce urinary incontinence across diverse populations of women with varying levels of incontinence. The final and newest focus of Professor Miller's research is on the relationship between fluid intake and the condition of over active bladder. This research has sought to characterize distinct patterns of overactive bladder syndrome and link these patterns to the amount, type and timing of fluid intake.

Professor Miller has a distinguished record of NIH funding, publications and presentations that address the identified research foci. Over the course of her career, she has been awarded as principal investigator an R21 and two R01 type grants that were funded as a part of a P50 Program Grant. She has authored or co-authored a total of 45 publications with 18 published since 2007. Of these she has first authored a total of 13 manuscripts, three since 2007. Her manuscripts are published in high ranked nursing and interdisciplinary journals. A total of 38 of these publications are data-based.

The quality and impact of Professor Miller's contributions to the science of urinary incontinence also have been noted through a number of awards granted by prestigious professional organizations including the American Urogynecologic Society (best paper, 2009, poster award, 2009), International Continence Society (2005) and *Journal of Wound and Ostomy Continence Nurses* (manuscript award, 2002).

#### Recent and Significant Publications:

Chakravarthy, V., Tolbert, M., Garcia, C.E., Miller, J.M. "Overactive bladder and caffeine: comparing women with and without mental health diagnoses." *IJUN* 2010; 4(1): 13 - 21.

DeLancey, J.O., Morgan, D.M., Fenner, D.E., Kearney, R., Guire, K., Miller, J.M., Hussain, H., Umek, W., Hsu, Y., Ashton-Miller, J.A. "Comparison of levator ani muscle defects and function in women with and without pelvic organ prolapse." *Obstet Gynecol.* 2007;109(2):295-302.

Miller, J.M., Sampsel, C., Ashton-Miller, J., Son, G., DeLancey, J. "Clarification and confirmation of the Knack maneuver: the effect of volitional pelvic floor muscle contraction to preempt expected stress incontinence." *Int Urogynecol J Pelvic Floor Dysfunct.* 2008;19(6):773-782.

Miller, J.M., Guo, Y., Becker-Rodseth, B. "Diary data subjected to cluster analysis of intake/output/void habits with resulting clusters compared by continence status, age, race." *Nursing Research* (in press).

Miller, J.M., Brandon, C., Jacobson, J., Kane-Low, L., Zielinski, R., Ashton-Miller, J., DeLancey, J. "MRI findings in patients at high risk for pelvic floor injury: studied serially post-vaginal childbirth." *Am J Roentgenol* 2010; 1995(3).

Service: Professor Miller has made significant service contributions to the School of Nursing, the University of Michigan, and the nursing profession. At the School of Nursing level, she has served as a member of the doctoral student admission committee, bylaw revisions committee, research day committee, the search committee for the associate dean for research and global affairs, and as a reviewer of abstracts from doctoral students for consideration for the Midwest Nursing Research Society. Professor Miller also is currently serving a three-year term on the School of Nursing Provider Reviewer Board.

In terms of university-level involvement, Professor Miller served two years as a member of the Executive Committee at the Institute for Research on Women and Gender, one year as an alternate member of the University Senate Assembly, and one year on the Institute for Research on Women and Gender community of scholars review committee. Her national service to the nursing profession includes being a manuscript reviewer for eight different peer-reviewed journals, being a member of the Women's Health Foundation Medical Advisory Board, and serving as a consultant for a Johnson & Johnson study design. In addition, Professor Miller has served as a member of GlaxoSmithKline/ AstellasPharma US Advanced Practice Advisory Board. She is currently serving as a member of the Study of Women's Health Across the Nation (SWAN) new study committee and on the BRIDGES (Bringing Simple Urge Incontinence Diagnosis and Treatment to Providers) Executive Committee and Publications/Presentations Committee.

#### External Reviewers:

Reviewer A: "Dr. Miller's scholarly output is impressive, both in her tenacity for pursuit of grant funding and the rate of scientific dissemination. Dr. Miller's work is known internationally and certainly nationally. Also, please note that her work is not confined to nursing circles, but is appreciated by physicians, bioengineers and allied health professionals."

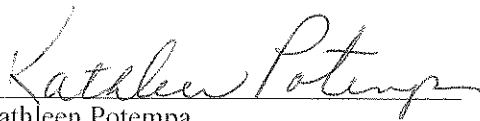
Reviewer B: "As is evident from her NIH funding and peer-reviewed publications in a diverse number of nursing and medical journals, she is the preeminent researcher in the effects of childbirth on the pelvic floor musculature, and whether interventions can impact the genesis of stress and urge incontinence in women. The fact that funding for these ten NIH studies came from five different institutes demonstrates the multidisciplinary nature of her research. In summary, Dr. Miller has been remarkably successful in her field, standing well above almost all other nurse researchers in the pelvic floor."

Reviewer C: "From the start of her career, Dr. Miller's publications have been of excellent quality. The writing is clear, the theoretical basis sound, and results and discussion are presented with parsimony and coherence. In addition, Dr. Miller has published substantive papers with leading scientists. The interdisciplinary nature of many of Dr. Miller's papers adds to the impact of scientific knowledge and clinical practice within and beyond nursing."

Reviewer D: "Dr. Miller's work is among the most innovative I have read in many years. It is simultaneously inventive, creative, and practical. Taken together, Dr. Miller's scholarly works places her among the top 1% of clinical researchers in nursing. I believe that her work exemplifies the contributions of clinical scholarship at its best, grounded in deep understanding of the area of practice, explored with the methodologic perspectives and methods appropriate to the aims of the investigation, including an amazing range of data collection approaches, each appropriate to answer the questions posed."

Reviewer E: "She has made outstanding contributions to advancing knowledge regarding the mechanism, epidemiology, and management of pelvic floor disorders in women. She is one of the leading nurse researchers in the world of urinary incontinence, and shows much promise for continued contributions. I believe she exceeds most of her peers in terms of scientific contributions.

Summary of Recommendation: In summary, Professor Miller is recognized as a highly productive scientist who has made significant contributions to the field of urinary incontinence in women. Her work has been recognized through several NIH funded grants and publication in prestigious nursing and interdisciplinary journals. She is recognized both as a highly capable and productive principle investigator as well as an effective collaborator on multidisciplinary teams. Her research is regarded as the highest in quality with significant relevance and impact on clinical practice. Professor Miller has demonstrated a clear and unequivocal record of excellence in multiple areas of teaching. Finally, the service contributions of Professor Miller have been substantial. She has been actively involved with internal and external service. She has been an active member of professional organizations and served in the capacity of journal and grant reviewer. It is with the support of the School of Nursing Executive Committee that I recommend Janis M. Miller for promotion to associate professor of nursing, with tenure, School of Nursing.

  
Kathleen Potempa  
Dean, School of Nursing

May 2011