

PROMOTION RECOMMENDATION
The University of Michigan-Flint
College of Arts and Sciences
Department of Psychology

Nathaniel Miller, assistant professor of psychology, Department of Psychology, College of Arts and Sciences, is recommended for promotion to associate professor of psychology, with tenure, Department of Psychology, College of Arts and Sciences.

Academic Degrees:

Ph.D.	2010	Bowling Green State University, Neural and Cognitive Sciences, Bowling Green, OH
M.A.	2004	Bowling Green State University, Neural and Cognitive Sciences, Bowling Green, OH
B.A.	2001	Capital University, Psychology, Bexley, OH

Professional Record:

2014-Present	Assistant Professor of Psychology, University of Michigan-Flint, Michigan
2013-2014	Assistant Research Scientist, School of Kinesiology, University of Michigan Ann Arbor, Michigan
2012-2013	Post-doctoral Research Fellow, School of Kinesiology and the Michigan Institute for Clinical and Health Research, University of Michigan, Ann Arbor, Michigan
2010-2012	Post-doctoral Research Fellow, Department of Physical Medicine and Rehabilitation, University of Michigan Medical School, Ann Arbor, Michigan

Summary of Evaluation:

Teaching: Since his arrival in the fall of 2014, Professor Miller has taught five different upper division courses, all of which represented new preparations – Principles of Research Design, Advanced Research and Writing in Psychology, Cognitive Psychology, Biological Psychology, and a capstone seminar in perception. Professor Miller’s teaching philosophy combines the teaching of content knowledge and skills with critical thinking and instilling a passion for learning. His course materials demonstrate continual improvement as an outcome of his participation in numerous teaching workshops and trainings. These efforts are also reflected in his very strong Student Evaluations of Teaching scores. The averages for the questions “Overall, this was an excellent course,” “I learned a great deal in this course,” and “Overall, the instructor was an excellent teacher,” were 4.37, 4.48 and 4.63, respectively. His student course evaluations regularly contained such comments as “approachable,” “well prepared,” “incorporates critical thinking,” and “always willing to help.” His peer evaluations of teaching also underscore his effectiveness in teaching. As one of his colleagues commented, “His teaching not only demonstrates expertise in the subject matter, but the ability to clearly explain and provide numerous examples to facilitate student understanding, integration and application of concepts.” Professor Miller has contributed to his department’s assessment efforts and has implemented “real-time” assessments of student learning in many of his classes. He demonstrates his commitment to student learning through his academic advising and by involving students in his research. In the past five years, Professor Miller has worked with thirteen unique students across a dozen student research posters and three presentations.

Research: Professor Miller is a cognitive neuroscientist whose research has identified patterns of cell loss in areas of the brain affected by Parkinson’s disease that result in variations in subjects’ responsiveness to drugs aimed at redressing the symptoms of Parkinson’s. By tracing these results to specific genetic markers, patients will have an enhanced understanding of the likelihood of a treatment’s efficacy. More recently, Professor Miller’s scholarly activity has focused on the effectiveness of a community-based exercise

program designed to mitigate the cognitive and motor symptoms of Parkinson's disease. Professor Miller is poised to continue his scholarly productivity as evidenced by his collaborative research to develop a measure of Parkinson's disease tremors with the goal of mitigating some of the symptoms. Professor Miller has also established a substantive record of securing internal and external funding for his research. Most recently, he was part of a multidisciplinary project awarded \$60,000 to explore community-based exercised programs for individuals with Parkinson's disease. Professor Miller has also received a \$10,000 grant to establish a Parkinson's disease care and research network across Michigan. Professor Miller has leveraged his scholarly activity to involve students in his research. Professor Miller has mentored over thirty undergraduate students who, over the years, have presented a dozen research posters, delivered three oral presentations at local, regional and national conferences, as well as several students serving as co-authors on forthcoming manuscripts.

Recent and Significant Scholarly Activity:

Stein, J. M. & Miller, N. S. (2018). Individual Differences in apology acceptance and forgiveness: The influence of handedness. *Laterality: Asymmetries of Body, Brain, and Cognition*. Advance online publication.

Miller, N. S., Chou, K. L., Bohnen, N. I., Muller, M. L. T. M. & Seidler, R. D. (2018). Dopaminergic polymorphisms associated with medication responsiveness of gait in Parkinson's disease. *Parkinson's and Related Disorders*, 48, 54-60.

Miller, N. S., Kwak, Y., Bohnen, N. I., Muller, M. L. T. M., Dayalu, P., & Seidler, R. D. (2013). The pattern of striatal dopaminergic denervation explains sensorimotor synchronization accuracy in Parkinson's disease. *Behavioral Brain Research*, 257, 100-110.

Service: Professor Miller has provided outstanding service to his department, college, and local community, and has done so in ways that contribute to his professional development as a teacher and as a researcher. At the department level, he began by serving on the student awards committee to help him appreciate the challenges students face outside of the classroom. Given his commitment to the assessment of student learning, Professor Miller also served his department by developing assessments in the area of cognitive psychology and has served as a peer reviewer for his colleagues in both face-to-face and online settings. For the college, Professor Miller served on the Spring Interim Committee, as well as a one semester replacement term on the Curriculum Committee. Both of these experiences have helped Professor Miller become a better advisor and mentor to his students. Professor Miller's scholarly activity in the area of Parkinson's disease has created meaningful service opportunities that have benefitted his local community – initially by establishing an exercise intervention to mitigate the symptoms from Parkinson's disease (“Pedaling for Parkinson's”) and later by developing online resources to advance teaching, research and community involvement focused on Parkinson's disease. While these are all areas of substantive service that integrate his teaching and scholarly activity, Professor Miller also has served his university by being a member of the university's Extended Learning Advisory Committee, and the University of Michigan-Flint's Women's Commission. Professor Miller contributes to his professional community by serving as a peer reviewer for seven different academic journals and is a member of numerous professional organizations.

External Reviewers:

Reviewer (A): “...the research is well done and is a significant contribution to the field... Dr. Miller's research helps to clarify genetic factors that are related to gait and medication responsiveness.”

Reviewer (B): “The quality of Dr. Miller's work is exceptionally high with publications in some of the top journals in the field including Brain and Behavioral Research and Parkinsonism and Related Disorders.”

Reviewer (C): “Dr. Miller has a very clear focus on Parkinson’s Disease, and appears to be in the process of creating an impact with his work. His examinations of exercise related impacts on the disease are noteworthy and have potential for transforming treatment.”

Reviewer (D): “Broadly speaking, Dr. Miller’s research activity at UM continues his lasting interest in the symptoms, biological mechanisms, and treatment of Parkinson’s disease that utilizes productive collaborations involving diverse methodologies.”

Reviewer (E): “Quality scholarship, such as Dr. Miller’s, with clinical populations requires years of intense work before the manuscript appears in print. Dr. Miller’s commitment to improving patient’s lives through scholarship shows true fortitude and grit.”

Summary of Recommendation:

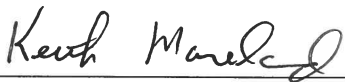
Professor Miller’s pedagogy emphasizes students mastering content knowledge and skills while applying critical thinking and fostering a passion for learning. His dedication to his students’ learning is demonstrated by his ongoing efforts to continually improve his teaching and by involving nearly three dozen students in his research projects. Professor Miller’s research has identified specific genetic markers that are associated with variations in subjects’ responsiveness to drugs aimed at redressing the symptoms of Parkinson’s disease. His research also has investigated the efficacy of exercise in mitigating the symptoms associated with Parkinson’s disease. Professor Miller has established an outstanding record of service to his department, college, and local community, and has done so in ways that contribute to his professional development as a teacher and as a researcher. I recommend Nathaniel Miller for promotion to associate professor of psychology, with tenure, Department of Psychology, College of Arts and Sciences.

Recommended by:



Susan Gano-Phillips, Dean
College of Arts and Sciences

Recommendation endorsed by:



Keith Moreland, Interim Provost and
Vice Chancellor for Academic Affairs



Debasish Dutta, Chancellor
University of Michigan-Flint

May 2020