

PROMOTION RECOMMENDATION
The University of Michigan-Dearborn
College of Arts, Sciences, and Letters

Susana M. Peciña, associate professor of psychology, with tenure, Department of Behavioral Sciences, College of Arts, Sciences, and Letters, is recommended for promotion to professor of psychology, with tenure, Department of Behavioral Sciences, College of Arts, Sciences, and Letters.

Academic Degrees:

Ph.D.	1998	University of Michigan, Biopsychology, Ann Arbor, MI
M.S.	1993	University of Michigan, Biopsychology, Ann Arbor, MI
B.S.	1991	Bowling Green State University, Biology, Bowling Green, OH

Professional Record:

2011 – present	Associate Professor (with tenure), Department of Behavioral Sciences, University of Michigan-Dearborn
2015 – present	Research Faculty Affiliate, Center for Human Growth and Development, University of Michigan-Ann Arbor
2010 – 2015	Research Faculty, Center for Human Growth and Development, University of Michigan-Ann Arbor
2007 – 2011	Assistant Professor, Department of Behavioral Sciences, University of Michigan-Dearborn
2002 – 2007	Research Specialist, Department of Psychology, University of Michigan- Ann Arbor
2000 – 2002	Post-doctoral Fellow, Department of Psychology, University of Michigan-Ann Arbor

Summary of Evaluation:

Teaching: Professor Peciña is rated excellent in teaching. Professor Peciña has a true passion for teaching and for enhancing the lives of students. She regularly teaches introductory psychology (both in-class and online versions), the upper-level physiological psychology course (both in-class and online versions), and an essential graduate-level course titled Biological Foundations of Health Psychology. Thus, she is one of the few psychology faculty members who teaches courses at all three levels. Enrollment in her classes is consistently strong, and last year she expanded her repertoire by developing a course in advanced physiological psychology. As her syllabi indicate, each semester she revises her courses so as to keep them up-to-date and to incorporate a variety of new methodologies, videos, activities, assignments, and online resources. This dedication to the craft of teaching also propelled her to co-author a peer-reviewed pedagogical publication for the National Center for Case Study Teaching in Science. Across all Professor Peciña's classes, students' average ratings demonstrate their highly positive evaluations of her overall teaching (4.52) and her courses (4.31). In addition, students rate her as having very high achievement standards (4.59). Professor Peciña is also an exceptional mentor to undergraduate and master's-level students. Along with mentoring her research assistants, she mentors students in their own independent studies and research projects, and she supportively assists students in solidifying their educational and career goals.

Research: Professor Peciña is rated excellent in her research. Her research on emotions and motivation is internationally known and has had major impact in the field of biopsychology. Much of her painstaking research concerns the neurophysiology of motivation and of pleasure (e.g., "hedonic hotspots" found in the brain area called the nucleus accumbens), which she has primarily studied in rats and mice. This work

has transformed the field of affective neuroscience (the neurobiology of emotion) and has had profound implications for understanding the neural mechanisms of addiction and obesity, in both animals and humans. Her cutting-edge, highly respected research involves innovative perspectives and methodologies that she has not only applied to animal studies, but also to human research concerning infant learning and the neurobiology of depression in adults. Professor Peciña's empirical and review articles are of the highest quality. Her seminal, first-author *European Journal of Neuroscience* article (in 2013) revealed a new discovery about the neural substrates of how opioids impact motivation. In her invited, first-author, book chapter (published by Oxford University Press) she provided an eloquent, comprehensive review of the literature concerning the neurobiology of eating, specifically, the neurophysiological differences between "wanting" (i.e., desire, motivation) and "liking" (i.e., pleasure). In 2010, Professor Peciña initiated a five-year collaboration with an international, interdisciplinary research team at the Center for Human Growth and Development (on the Ann Arbor campus) to study the relation between emotions and learning in children from China, as well as how iron deficiency may negatively impact these factors. In 2016, the first article from this research collaboration was published in the well-respected journal, *Cognition and Emotion*. Professor Peciña's research agenda also includes studying how emotions relate to psychological disorders. Collaborating with a research team on the main campus, she investigated the neurobiology associated with adults' depression and anxiety, resulting in a 2017 *European Neuropsychopharmacology* publication.

Recent and Significant Publications:

- Marta Peciña, Magdalena Sikora, Erich Avery, Joseph Heffernan, Susana Peciña, Brian Mickey, Jon-Kar Zubieta, "Striatal D2/3 Receptors in Major Depression: Anhedonia, Anxiety and Clinical Responses," *European Neuropsychopharmacology*, Vol. 27, No. 10, October 2017, pg. 977-986.
- Rosa Angulo-Barroso, Susana Peciña, Xu Lin, Mingyan Li, Julia Sturza, Jie Shao, Betsy Lozoff, "Implicit Learning and Emotional Responses in Nine Month Old Infants," *Cognition and Emotion*, Vol. 4, No. 5, May 2016, pg. 1-10.
- Jane Sheldon, Susana Peciña, "Brain Workouts: What Helps Cognitive Fitness?" *National Center for Case Study Teaching in Science*, December 2016, http://sciencecases.lib.buffalo.edu/cs/collection/detail.asp?case_id=890&id=890.
- Susana Peciña, Kent Berridge, "Food 'Liking' and 'Wanting': A Neurobiological Perspective," In Nicole Avena (Ed.), *Hedonic Eating: How the Pleasurable Aspects of Food Can Affect Our Brains and Behavior*, Oxford University Press, England, May 2015, pg. 125-146.
- Susana Peciña, Kent Berridge, "Dopamine or Opioid Stimulation of Nucleus Accumbens Similarly Amplify Cue-Triggered 'Wanting' for Reward: Entire Core and Medial Shell Mapped as Substrates for PIT Enhancement," *European Journal of Neuroscience*, Vol. 37, No. 9, May 2013, pg. 1529-1540.

Service: Professor Peciña is rated excellent in her service. Professor Peciña is a highly involved member of the campus community, who has gained the trust and respect of both faculty and administrators. At the department level, she serves on the Lecturers' Employee Organization Review Committee and the Psychology Online Funds Committee, and served on the Psychology Promotion and Tenure Guidelines Revision Committee. At the college level, she was the Behavioral Sciences representative to the CASL Curriculum Committee (2011-2014) and served on the university's Difference Makers Selection Committee (2012-2015). Additionally, from 2011 to 2016 she represented the Behavioral Sciences Department on the Campus Grants Committee. In 2014 she was elected as the At Large Representative to the Behavioral Sciences Executive Committee and in 2015 she was elected as a UM-Dearborn faculty representative to the University of Michigan Senate Assembly on the main campus. In 2016, she was elected as the at-large representative to the CASL Executive Committee and was selected by Provost Davy to serve on the Provost's Faculty Advisory Committee. Professor Peciña's professional service includes grant reviewing and ad hoc reviewing for numerous top tier journals.

External Reviewers:

Reviewer A: "The idea that motivational and hedonic aspects of reinforcement could be isolated is now a crucial piece of modern addiction theory and the evidence supporting the dissociation comes from the pioneering work of Dr. Pecifia and her mentor, and now colleague, Dr. Berridge."

Reviewer B: "Dr. Pecifia demonstrates her ability to persistently focus on a topic over a period that spanned decades and to produce high quality papers that are highly cited and significantly impact the research community."

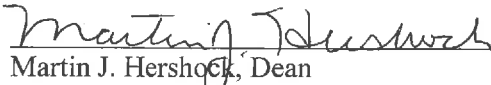
Reviewer C: "Dr. Pecifia's work thus attracts attention, because of her established record of innovation and her series of seminal studies – and continues to be referenced because of its real impact on theoretical development that addresses fundamental issues of psychology with real world relevance."

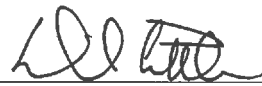
Reviewer D: "The research questions she tackles and the procedures and techniques she used are quite extraordinary; and this is what sets her off from her peers in the neuroscience community."

Reviewer E: "Susana Pecifia's work in Behavioral Neuroscience has gained her both national and international recognition. She has had a large impact on our understanding of the neural basis of reward and taste hedonics. More than any other in the field of affective neuroscience, this work provided an understanding of the neural basis of "liking" of tastes such as sucrose. Susana has had 19 highly acclaimed peer-reviewed journal articles and two book chapters published by Oxford University Press; indeed, she is senior author of 11 of these articles in some of the most prestigious journals in the field."

Summary of Recommendation:

Professor Pecifia is an internationally known scholar whose work is widely cited and has significantly impacted the field of affective neuroscience. She is also an exemplary teacher and mentor for both undergraduate and graduate students. Her numerous, substantive service and leadership contributions extend to the department, college, university, and profession. We are pleased to recommend, with the strong support of the College of Arts, Sciences, and Letters Executive Committee, Susana M. Pecifia for promotion to professor of psychology, with tenure, Department of Behavioral Sciences, College of Arts, Sciences, and Letters.


Martin J. Herschok, Dean
College of Arts, Sciences, and Letters


Daniel Little, Chancellor
University of Michigan-Dearborn

May 2018