

PROMOTION RECOMMENDATION
UNIVERSITY OF MICHIGAN
MEDICAL SCHOOL
DEPARTMENT OF MOLECULAR AND INTEGRATIVE PHYSIOLOGY

Scott D. Pletcher, Ph.D., associate professor of molecular and integrative physiology, with tenure, Department of Molecular and Integrative Physiology, Medical School, is recommended for promotion to professor of molecular and integrative physiology, with tenure, Department of Molecular and Integrative Physiology, Medical School [also being promoted to research professor, Institute of Gerontology].

Academic Degrees:

Ph.D.	1997	University of Minnesota
B.S.	1992	Oakland University

Professional Record:

2009-present	Associate Professor of Molecular and Integrative Physiology and Research Associate Professor, Institute of Gerontology, University of Michigan
2008-2009	Associate Professor of Molecular and Human Genetics, Baylor College of Medicine
2004-2008	Assistant Professor of Molecular and Human Genetics, Baylor College of Medicine

Summary of Evaluation:

Teaching: Dr. Pletcher is very active in teaching, serving as the course co-director for Physiology 555: Integrative Genomics and as a lecturer in Pathology 581. He also directs the Biology of Aging Journal Club, and has served several years as a faculty evaluator for the Cell and Molecular Biology seminar class. Dr. Pletcher currently supervises one research investigator, five post-doctoral fellows, and over 10 undergraduate students in the laboratory setting. He has served on at least 20 thesis committees and supervised (or currently supervises) a total of eight Ph.D. students.

Research: Dr. Pletcher is a very well-funded investigator and serves as the principal investigator on one National Institutes of Health R01 (through 2016), a successfully funded core of the Nathan Shock Center, and is the recipient of the Ellison Medical Foundation Senior Scholars Award through 2014 and is a co-principal investigator on a Transformative NIH R01 through 2017. He recently took over as director of the T32 training grant on the Biology of Aging. Dr. Pletcher is also a member of the inaugural League of Research Excellence at the University of Michigan; and has two new NIH R01 applications pending final likely funding decisions given their outstanding percentile scores of 4% and 5%, respectively. Since arriving at the University of Michigan in 2009, Dr. Pletcher has twelve publications in high-impact journals, with seven of these as senior author. His work has appeared in high profile journals including *PLoS Genetics*, *Proceedings of the National Academy of Sciences*, and *PLoS Biology*. He has a total of 50 original peer-reviewed publications and more than 12 reviews, commentaries and book chapters. As one example of his work, one of his research projects examines how diet-restriction delays changes in biological process in the aging fly. This work has identified which nutritional signals extend lifespan and alter physiology in *Drosophila* and has opened new areas in the field of aging and the biological response to diet restriction.

Recent and Significant Publications:

Poon P, Kuo T-H, Linford NJ, Roman G, Pletcher SD: Carbon dioxide sensing modulates physiology and lifespan in *Drosophila*. *PLoS Biology* 8:e100035, 2010.

Kabil H, O Kabil, R Banerjee, Harshman L, Pletcher SD: Increased transsulfuration mediates dietary restriction in *Drosophila*. *PNAS* 108:16831-16836, 2011.

Kuo TH, Yew JY, Fedina TY, Dreisewerd K, Dierick HA, Pletcher SD: Aging modulates cuticular hydrocarbons and sexual attractiveness in *Drosophila melanogaster*. *J Exp Biol* 215:814-821, 2012.

Kuo TH, Fedina TY, Hansen I, Dreisewerd K, Dierick HA, Pletcher SD: Insulin signaling mediates sexual attractiveness in *Drosophila*. *PLoS Genet* 8:e1002684, 2012.

Linford NJ, Chan TP, Pletcher SD: Re-patterning sleep architecture in *Drosophila* through gustatory perception and nutritional quality. *PLoS Genet* 8:e1002668, 2012.

Service: In terms of service, Dr. Pletcher has also excelled. His contributions to the scientific community through the development of analytical methods and the free distribution of software are well known and award winning. He has written and distributed software for detailed video analysis of fly behavior (VideoFly) and for high-throughput collection and analysis of aging data (DLife). Dr. Pletcher serves on both national and international advisory boards and serves as a reviewer for many funding agencies. Two well-known foundations, the Ellison Medical Foundation and the American Federation of Aging Research have sought Dr. Pletcher's assistance in reviewing research grants. He has served on several NIH study sections [e.g., Cellular Mechanisms in Aging and Development (CMAD) Study Section], and regularly reviews NIH program project grants. Dr. Pletcher is a member of the Wellcome Trust Functional Genomics of Aging Advisory Board (UK), and he has held a scientific advisory appointment with the NIH Mouse Aging Intervention Program (USA). Dr. Pletcher has been an associate editor for the prestigious *Aging Cell* since 2002 and holds editorial positions with the *American Journal of Physiology-Endocrinology and Metabolism* and the new journal *Longevity and Healthspan*. Dr. Pletcher is a member of the Molecular and Integrative Physiology awards committee and has overseen the department seminar series. He has also been a member and currently directs the physiology Ph.D. graduate committee.

External Reviewers:

Reviewer A: "Scott is simply one of the most creative and rigorous scientists that I know. He is an international leader in the biology of ageing field and has made major contributions to the field in demography, dietary restriction, sensory perception, insulin signaling, and metabolism....In recognition of his accomplishments, Scott has received two prestigious Ellison Medical Foundation Awards in Aging (both new scholar and senior scholar awards), as well as the Glenn/AFAR Breakthrough in Gerontology Award."

Reviewer B: "...Scott Pletcher has a demonstrated ability to identify a fruitful area of research, do the experiments and analyses necessary to characterize and describe the processes under discussion in a series of well-cited papers and then move on to a different set of related but new and equally fruitful questions."

Reviewer C: "...in my more than fifty years of participation in academic life, it is hard for me to remember a more deserving candidate for promotion to a position of Professor at a major research and teaching institution....If I were in a position to recommend the recruitment of a Full Professor at my institution, Scott would be among the top one or two on my list. He would easily pass muster by our Appointments and Promotions Committees."

Reviewer D: "Dr. Pletcher's work has had an impressive impact on the field of biogerontology—the study of the basic biological mechanisms that affect patterns of aging. In looking over the whole of his work, it is striking that important contributions include both molecular and statistical work, and include studies in an impressive number of unique but interconnected realms."

Reviewer E: "...Scott's reputation among his peers, the contributions that he has made in his specialty and his impact on the field of the biology of aging are all first-class, marking him as a thought-leader in our discipline."

Reviewer F: "...Scott is a good citizen....I have found that he is always willing to help junior investigators with their research and considers all documented research observations. He is one of the first investigators in invertebrate aging I suggest to students and junior faculty to talk to with respect to this area of research because of his extensive knowledge of the areas, but more importantly, because of his unbiased view of the research."

Summary of Recommendation:

Dr. Pletcher is an internationally recognized investigator in the field of aging research, as demonstrated by his publication record and the NIH funding he has acquired. He directs the graduate program in physiology and oversees an NIH T32 training grant on the Biology of Aging. Overall, his scholarly contributions and service to the department and the Medical School are exemplary. I am pleased to recommend Scott D. Pletcher, Ph.D., for promotion to professor of molecular and integrative physiology, with tenure, Department of Molecular and Integrative Physiology, Medical School.



James C. Woolliscroft, M.D.
Dean
Lyle C. Roll Professor of Medicine

May 2013