

PROMOTION RECOMMENDATION
The University of Michigan
School of Kinesiology

Jeffrey F. Horowitz, associate professor of kinesiology, with tenure, School of Kinesiology, is recommended for promotion to professor of kinesiology, with tenure, School of Kinesiology.

Academic Degrees:

Ph.D.	1996	University of Texas, Exercise Physiology, Austin, TX
M.S.	1992	University of Texas, Exercise Physiology, Austin, TX
B.S.E.	1989	University of Iowa, Biomedical Engineering, Iowa City, IA

Professional Record:

2006-present	Associate Professor (with tenure), School of Kinesiology, University of Michigan
2000-2006	Assistant Professor, School of Kinesiology, University of Michigan
1999-2000	Research Instructor in Medicine, Division of Gastroenterology, Washington University School of Medicine, Washington University, St. Louis, MO

Summary of Evaluation:

Teaching: Professor Horowitz has proved himself an excellent teacher. He has taught an average of two courses per year, one larger undergraduate class and one graduate seminar. Student evaluations have been excellent. In 2010, Kinesiology students selected Professor Horowitz as the recipient of the Excellence in Teaching Award. Most recently he was selected to represent Kinesiology in the university-wide Health Science Teaching Academy.

In addition to his classroom teaching Professor Horowitz has mentored two Ph.D. graduates who both received excellent post-doctoral positions and have gone on to established faculty positions. He has guided two more toward imminent graduation in 2012, with another in her fourth year. Further, he has mentored two post-doctoral fellows, 13 masters students and 21 undergraduate students in his laboratory since coming to Michigan.

Research: Professor Horowitz's research addresses how changes in exercise and/or diet alter energy balance, endocrine responses, and the regulation of substrate metabolism to impact health outcomes such as insulin resistance, type 2 diabetes, cardiovascular disease, and other obesity-related diseases. Since earning his associate professor rank he has maintained a steady record of publication (average of two papers per year). The high quality of his research is evidenced by the high impact factors of the journals, the frequency of citations of his publications (including 94 citations for a study published in 2007), and the consistently enthusiastic support provided from all external letters. He publishes in the best journals in his field, with impact factors as high as 14 (*Journal of Clinical Investigation*) and 80% \geq 4.0. The H-Index for his publications is 18.

Professor Horowitz's record of external funding is impressive, reflecting continuous NIH funding as the PI via R01s since his last promotion along with being the PI on a large foundation grant and a core director on an NIH-funded Center Grant (Michigan Nutrition and Obesity Research Center).

Recent Significant Publications:

- Cornford, AS, Barkan, AL, and Horowitz, JF. Rapid suppression of growth hormone concentration by overeating: Potential mediation by hyperinsulinemia. *J Clin Endocrinol Metab.* 96(3):824-30, 2011. PMID: PMC3047219
- Newsom, SA, Schenk, S, Thomas, KM, Harber, MP, Knuth, ND, Goldenberg, N, and Horowitz, JF. Energy deficit after exercise augments lipid mobilization but does not contribute to the exercise induced increase in insulin sensitivity. *J Appl Physiol.* 108(3):554-60, 2010. PMID: 20044472
- Schenk, S, Harber, MP, Shrivastava, CR, Burant, CF, and Horowitz, JF. Improved insulin sensitivity after weight loss and exercise training is mediated by a reduction in plasma fatty acid mobilization, not enhanced oxidative capacity. *J. Physiol.* 587(20):4949-4961, 2009. PMID: 19723783
- Knuth, ND, Shrivastava, SR, and Horowitz, JF. Reducing dietary fat from a meal increases the bioavailability of exogenous carbohydrate without altering plasma glucose concentration. *J Appl Physiol.* 106(1): 122-129, 2009. PMID: 19008494
- Schenk, S and Horowitz, JF. Acute exercise increases triglyceride synthesis in skeletal muscle and prevents fatty acid-induced insulin resistance. *J. Clin Invest.* 117(6): 1690-1698, 2007. PMID: 17510709

Service: Professor Horowitz has served as a grant reviewer for NIH, the National Science Foundation, Natural Sciences and Engineering Research Council of Canada, Clinical and Translational Science Award pilot grants, and the Veteran's Administration. He has reviewed for many professional journals among them are *American Journal of Clinical Nutrition*, *British Journal of Nutrition*, *Cell Metabolism*, *International Journal of Sports Nutrition and Exercise Metabolism*, and the *Journal of Applied Physiology*. Professor Horowitz serves on several University committees. His colleagues in Kinesiology have repeatedly elected him to serve on the School's Executive Committee. He has volunteered for numerous other labor-intensive committees, such as the School building committee, faculty search committees, curriculum analysis and reform committee, and the salary equity committee. Additionally, he co-wrote a successful proposal to obtain funding for two new faculty positions in physical activity and nutrition through the Provost's Faculty Expansion Initiative.

External Reviewers:

Reviewer A: "He is in the top of his field. ... Jeff's grant-awarded record is outstanding."

Reviewer B: "I was very impressed to see that he received the Excellence in Teaching Award for the School of Kinesiology in 2010. Notable is the number of graduate students that he had mentored. All of his students and postdoctoral fellows have published well under his supervision and these publications speak well for his mentoring."

Reviewer C: "I firmly believe that his research and service credentials to this point in his academic career are excellent and that his national and international scientific reputation exceeds those of most successful faculty members at this stage of their career."

Reviewer D: "I believe [he] is one of the leading researchers in the area of exercise, lipid metabolism and insulin action, and I have no doubt he will continue to make a significant contribution in the years ahead."

Reviewer E: "Jeff has been able to design elegant studies that truly provide novel insight into the role of exercise in relation to metabolism."

Reviewer F: "His 2007 paper in the *Journal of Clinical Investigation* examining the role of exercise in relation to lipid-induced insulin resistance is a seminal paper in the exercise and metabolism field. There are probably only a handful of Kinesiology professors who have ever generated work that was worthy of publication in this prestigious, high impact journal."

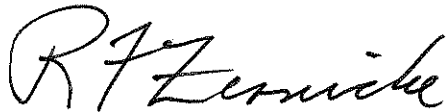
Reviewer G: "Exploring the underlying mechanism(s) to any physiological response is critical to advancing a research program to the highest level, to publishing in the premier journals, to being competitive for NIH funding, and most importantly, to making a meaningful and sustained impact on the field. In my estimation, Dr. Horowitz has advanced to this level, particularly during the period since his last P&T review."

Reviewer H: "Jeff's publications appear in top ranked journals for his field and are well cited."

Reviewer I: "I would put Dr. Horowitz in the top 5%. Dr. Horowitz has established himself as a superstar in the field."

Reviewer J: "His work in the area of exercise and fat partitioning is particularly noteworthy. He uses state of the art techniques, and the science is cutting edge."

Summary of Recommendation: Professor Horowitz is an outstanding and productive member of the School of Kinesiology faculty. He is a well-regarded scientist in his field and beyond. He is an excellent teacher and mentor who has provided service to his school, university and profession. It is with unanimous support at all levels of review—departmental, school, and executive committee—that I recommend Jeffery F. Horowitz for promotion to professor of kinesiology, with tenure, in the School of Kinesiology.



Ronald F. Zernicke
Dean, School of Kinesiology

May 2012