

PROMOTION RECOMMENDATION
The University of Michigan
School of Kinesiology

Erin Giles, assistant professor of kinesiology, School of Kinesiology, is recommended for promotion to associate professor of kinesiology, with tenure, School of Kinesiology.

Academic Degrees:

Ph.D. 2007 McMaster University, Medical Science, Ontario, Canada
B.S. 2000 University of Guelph, Biomedical Sciences, Ontario, Canada

Professional Record:

2022 – present Assistant Professor, School of Kinesiology, University of Michigan
2017 – present Graduate Faculty, Interdisciplinary Graduate Program in Genetics, Texas A&M University, College Station, TX
2016 – 2022 Assistant Professor, Department of Nutrition, Texas A&M University, College Station, TX
2008 – 2016 Post-doctoral Fellow, Division of Endocrinology, Diabetes & Metabolism, University of Colorado School of Medicine, CO

Summary of Evaluation:

Teaching: Since joining the School of Kinesiology, Professor Giles has consistently taught the core writing-intensive course in the Movement Science curriculum (MVS 219: Scientific Writing), leveraging her experience teaching scientific writing at Texas A&M (TAMU) University. Professor Giles continues to receive strong teaching evaluations at UM, particularly for the items that pertain to the qualities of the instructor.

Professor Giles continues to demonstrate success as a research mentor. She continues to serve as the primary mentor for one of her TAMU Ph.D. students even after starting to work at the UM. Professor Giles is currently recruiting a Ph.D. student to join her new UM lab, and she has provided research experiences for five undergraduate students, including students recruited through the Undergraduate Research Opportunities Program (UROP) and the Cancer Research Summer Internship Program. Two of Professor Giles' undergraduate student mentees received the Blue Ribbon Certificate for the top poster presentations during the 2023 UROP Annual Spring Research Symposium. Professor Giles has taken many steps to develop and maintain an inclusive and diverse environment in her laboratory.

Research: Professor Giles has published 21 peer-reviewed journal articles, with 33 publications in total, and currently has two additional manuscripts under peer review. She is the corresponding author on eight of her publications, and seven of those have been published while she has been an assistant professor. Professor Giles' work has been published in journals with moderate to high impact factors and cited more than 1200 times.

Professor Giles has built a successful funding pathway with over \$3 million as the PI on numerous grants from a variety of funding agencies such as NIH, Craig H. Neilsen Foundation,

and the Cancer Prevention Research Institute of Texas. Professor Giles was recently (2023) awarded an R01, which received a score in the 4th percentile – a very impressive achievement. Professor Giles has been successful with continual funding for her research since 2008. This not only has provided a strong foundation for her long-term success as an independent investigator, but also shows a rigorous external endorsement of her as a scientist and the quality of her research. Professor Giles has had a growing presence in delivering talks at conferences with a national and/or international audience, a strong indication that she is a sought-after expert in her field.

Recent and Significant Publications:

Wellberg EA, Corleto KA, Checkley LA, Jindal S, Johnson G, Higgins JA, Obeid S, Anderson SM, Thor AD, Schedin PJ, MacLean PS, Giles ED. Preventing ovariectomy-induced weight gain decreases tumor burden in rodent models of obesity and postmenopausal breast cancer. *Breast Cancer Res.* 2022 Jun 20;24(1):42. PMID: PMC9208221.

Giles ED, Jindal S, Wellberg EA, Schedin T, Anderson SM, Thor AD, Edwards DP, Maclean PS,

Schedin P. Metformin inhibits stromal aromatase expression and tumor progression in a rodent model of postmenopausal breast cancer. *Breast Cancer Res.* 2018;20(1):50. Epub 20180614. doi: 10.1186/s13058-018-0974-2. PubMed PMID: 29898754; PMID: PMC6000949.

Giles ED** and Wellberg EA. Preclinical models to study obesity and breast cancer in females: Considerations, Caveats, and Tools. *Journal of Mammary Gland Biology and Neoplasia.* 2020 Nov 4:1-7. PMID: PMC8197449

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Giles ED, Brown IL, Maclean PS, Pan Z, Melanson EL, Heard KJ, Cornier MA, Marden T, Higgins JA. The in vivo net energy content of resistant starch and its effect on macronutrient oxidation in healthy adults. *Nutrients.* 2019;11(10). Epub 20191016. doi: 10.3390/nu11102484. PubMed PMID: 31623184; PMID: PMC6835355.

Giles ED**, Purcell SA, Olson J, Vrieling A, Hirko K, Woodruff K, Playdon MC, Thomas G, Gilmore LA, Moberly HK, Newell-Fugate AE. Trends in Diet and Cancer Research: A Bibliometric and Visualization Analysis. *Cancers.* 2023 Jul 25;15(15):3761. PMID: PMC10417030 doi: 10.3390/cancers15153761IF: 5.2

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Service: Professor Giles' institutional and professional service contributions are considered to be excellent. Immediately after joining the School of Kinesiology (SoK), Professor Giles joined the SoK Exercise Oncology search committee and quickly became an active and valued member of that committee. Professor Giles is an engaged and respected member of the faculty, making valuable contributions to the Movement Science Program, Graduate Program, and school faculty meetings. Outside of the school, Professor Giles reviews grants for the Department of Defense and reviews manuscripts for several journals while playing an increasing number of roles within the Obesity Society, the leading professional society focused on obesity science, treatment, and prevention. A highlight of Professor Giles' professional service has been her involvement in the NIH-sponsored Transdisciplinary Research in Energetics and Cancer (TREC) training program. She began as a TREC fellow and, more recently, has served as a session lead and a peer mentor for more junior faculty.

External Reviewers:

Reviewer A: “In my opinion, Dr. Giles’s [sic] most important contributions have centered around the use of different types of interventions to examine how to alter outcomes for ER+ breast cancer patients. She has identified a novel mechanism of how metformin, the most commonly prescribed drug to treat diabetes, alters aromatase expression within ER+ breast tumors. This intervention could be particularly beneficial for postmenopausal patients with obesity. Further, Dr. Giles has identified that the transition to menopause represents a ‘window of opportunity’ for interventions to limit weight gain during this period to decrease breast cancer risk.”

Reviewer B: “The translational research expertise is really valuable, as Dr. Giles can use her skills to bridge the gaps between basic science and clinical studies, both observational/cohort type investigations with biosample banks and interventional studies of diet and exercise. The area of research, focusing on the obesity link with post-menopausal breast cancer risk and survivorship is especially important, and there are currently no standards of care for this risk group integrated effectively into clinical practice. We simply provide advice to avoid obesity and follow public health dietary guidelines without effective and fully reimbursed programs. Dr. Giles has the aspiration to provide the evidence-based interventions that form the basis for universally available clinical guidelines.”

Reviewer C: “Dr. Giles work is extremely important since it has provided one of the only clinically relevant preclinical models of menopause-impacted obesity and breast cancer. Prior models have failed to capture the wide range of human variables (e.g., hormone-dependence, intact immune system, etc) that her unique rat model possesses. Her recent Breast Cancer Research papers are fantastic examples of how these models can be leveraged to identify novel approaches to offset this pathogenic milieu.”


Reviewer D: “I lend my full support to the promotion and tenure of Dr Giles. The accomplishments outlined in her package are consistent with the fact that I have come to know her as an enthusiastic and dynamic researcher, communicator, and mentor. In this day and age when the productivity of junior faculty is often distilled down to impact factors and publications, Dr Giles is setting herself apart as a true academic – a dedicated researcher, a passionate and effective teacher, and a valued colleague and University citizen. You are fortunate to have her in your Department.”

Reviewer E: “Her CV showcases the strong collaborations she has formed with colleagues across the globe in doing energy balance and cancer research, and I am impressed at the number of invited talks she has given at numerous societies rather than at one or two societies. She is most definitely a national leader in preclinical energy balance and cancer research. ...incredibly impressed with her presentation skills and mentoring and inspiring early career investigators, so much so that I plan on appointing her as a Faculty member on my NCI R25 TREC. Of note, some of the other TREC Faculty members include Drs. Stephen Hursting (UNC-Chapel Hill) and Sandra Ryeom (Columbia), both full professors and giants in the field of preclinical models of energy balance and cancer research. Dr. Giles’ will add depth and breadth and easily hold her own alongside the other Faculty.”

Reviewer F: “The quality of Dr. Giles’ work is impeccable, as evidenced by the extraordinary number of citations of her work and the invitations to speak in major venues (The Obesity Society and the Endocrine Society). She has developed a unique rat model that overcomes a major impediment to recapitulating the human condition (with regard to immune function) that has truly ‘put her on the map.’ The focus of her research is also clear as demonstrated by her obvious forward trajectory in a focused area of obesity, menopause, and breast cancer risk. The quantity of her work would be considered average at 33 publications to date, if it were not for the high impact of so many of her papers. I would place Erin Giles in the top ten pre-clinical researchers on the topic of energy balance and cancer risk.”

Reviewer G: “...remarkable track record in securing external funding, exceeding \$3 million as a principal investigator. She has successfully secured grants from highly competitive sources, including the NIH (both R01 and R00 awards), CPRIT, and the Craig H. Neilsen Foundation. With an H-index of 15 and an i10 index of 20, Dr. Giles demonstrates a substantial scholarly impact, particularly notable for an assistant professor in the biological sciences. Her academic contributions have earned national recognition, exemplified by invitations to present her research at prestigious gatherings such as the Obesity Society and the Endocrine Society’s annual meetings.”

Summary of Recommendation: Professor Giles’ aggregate achievements in research, teaching, and service have resulted in strong and enthusiastic support at all levels in our school (Movement Science Program, school faculty, and School of Kinesiology Executive Committee) and among the external reviewers, for her promotion. We are very proud of Professor Giles for her seamless transition to Kinesiology and Rogel Cancer Center, her 4th percentile score on her first R01, her dedication to our undergraduate student mission, and her wonderful collegial style. We are fortunate to have her here in Michigan Kinesiology. It is with the support of the School of Kinesiology Executive Committee that I recommend Erin Giles for promotion to associate professor of kinesiology, with tenure, School of Kinesiology.



Lori Ploutz-Snyder
Dean, School of Kinesiology

May 2024