PROMOTION RECOMMENDATION
The University of Michigan
School of Kinesiology

Natalie Colabianchi, associate professor of health and fitness, with tenure, School of Kinesiology, is recommended for promotion to professor of kinesiology, with tenure, School of Kinesiology.

Academic Degrees:
Ph.D.   2002   Case Western Reserve University
M.A.   1998   University of Chicago
B.A.   1994   Baldwin Wallace College

Professional Record:
2017 – present   Research Associate Professor, Institute for Social Research, University of Michigan
2015 – present   Associate Professor, School of Kinesiology, University of Michigan
2011 – 2017   Research Assistant Professor, Institute for Social Research, University of Michigan
2006 – 2011   Assistant Professor, Arnold School of Public Health, University of South Carolina
2002 – 2006   Assistant Professor, School of Medicine, Case Western Reserve University

Summary of Evaluation:
Teaching: Professor Colabianchi has taught two different courses: AES 416 - Environmental and Policy: Approaches to Increasing PA and AES 100 - Introduction to Applied Exercise Science. Student evaluations are very strong generally ranging from 3.8 to 4.8 which is above the median for faculty in Kinesiology. She has worked with CRLT to secure appropriate teaching strategies. Her teaching approach is centered on active learning and includes lectures, case studies, small group discussions, debates, and student reports.

Professor Colabianchi is often invited as a guest speaker in courses within Kinesiology and other units including the School of Public Health, the School for Environment and Sustainability, and the Gerald R. Ford School of Public Policy on environmental issues and health/obesity. She mentors undergraduate students, graduate students, post-doctoral scholars, and junior faculty related to grant writing and other research projects. She has an excellent rate of publishing with her students. Since the fall of 2015, students are first authors on 24 of her 52 publications indicating sound mentorship. She has played a crucial role with the development of the curriculum for the undergraduate applied exercise science degree.

Research: Professor Colabianchi has an excellent peer-reviewed publication record in high quality medical and public health journals with 108 publications (four in press). Her citation trajectory from 2013-20 reflects a steep linear increase each year. Her research has been consistently funded through various agencies such as the National Institutes of Health (NIH), Robert Wood Johnson Foundation (RWJF), Department of Defense (DOD), and the Centers for

Disease Control and Prevention (CDC). She has demonstrated 11 continuous years of funding from NIH as a PI or co-PI. She has received more than $8M in funding through two R03s, two R21s, and three R01s with a variety of collaborators. This is among the very best in Kinesiology.

Professor Colabianchi's research has influenced the development of new national health policies. She has successfully established a national and international reputation that represents her critical leadership in the field. She was recognized within the School of Kinesiology with our research excellence award in 2016; the award recognizes the top researcher in the school as evaluated by our Executive Committee. For all of these reasons it is highly likely that her research scope, impact and trajectory will continue to rise.

Professor Colabianchi's research is interdisciplinary, and as such the publications have multiple authors with a relatively large (5-15) number of contributors. Professor Colabianchi serves as senior author on 15 of the 52 papers published since her hire in 2015 and her students serve as first author on 24 of the 52 papers.

Recent and Significant Publications:

Antonakos, C.L., Baiers, R., Dubowitz, T., Clarke, P., Colabianchi, N. (2020), "Associations between Body Mass Index, Physical Activity and the Built Environment in Disadvantaged, Minority Neighborhoods: Predictive Validity of GigaPan® Imagery," *Journal of Transport & Health*, 17:100867.

Antonakos, C.L., Coulton, C.J., Kaestner, R., Lauria, M., Porter, D.E., Colabianchi, N. (2020), "Built Environment Exposures of Adults in the Moving to Opportunity Experiment," *Housing Studies*, 35(4):703-719.

Twardzik, E., Clarke, P., Elliott, M.R., Haley, W.E., Judd, S., Colabianchi, N. (2019), "Neighborhood Socioeconomic Status and Trajectories of Physical Health-Related Quality of Life among Stroke Survivors," *Stroke*, 50(11):3191-3197.

Twardzik, E., Judd, S., Bennett, A., Hooker, S., Howard, V., Hutto, B., Clarke, P., Colabianchi, N. (2019), "Walk Score and Objectively Measured Physical Activity within a National Cohort," *Journal of Epidemiology and Community Health*, 73(6):549-556.

Colabianchi, N., Clennin, M.N., Dowda, M., McIver, K.L., Dishman, R.K., Porter, D.E., Pate, R.R. (2019), "Moderating Effect of the Neighborhood Physical Activity Environment on the Relation between Psychosocial Factors and Physical Activity in Children: a Longitudinal Study," *Journal of Epidemiology and Community Health*, 73(7):598-604.

Diaz, K.M., Howard, V.J., Hutto, B., Colabianchi, N., Vena, J.E., Safford, M.M., Blair, S.N., Hooker, S.P. (2017), "Patterns of Sedentary Behavior and Mortality in US Middle-aged and Older Adults: a National Cohort Study," *Annals of Internal Medicine*, 3;167(7):465-475.

Diaz, K.M., Howard, V.J., Hutto, B., Colabianchi, N., Vena, J.E., Blair, S.N., Hooker, S.P. (2016), "Patterns of Sedentary Behavior in US Middle-age and Older Adults: The REGARDS Study," *Medicine & Science in Sports & Exercise*, 48(3):430-8.

Saelens, B.E., Frank, L.D., Auffrey, C., Whitaker, R.C., Burdette, H.L., Colabianchi, N. (2006), "Measuring Physical Environments of Parks and Playgrounds. EAPRS Instrument Development and Inter-Rater Reliability," *Journal of Physical Activity and Health*, 3(s1):S190-S207.

Service: Professor Colabianchi has an excellent service record at the program, school, university and national and international levels. She has served as the program chair for applied exercise science for over two years, elected by her peers to the school's executive committee. At the university level, she has been a member, and then chair, of the research policies committee for the Office of the Vice President for Research. She has served as a grant reviewer for the National Institutes of Health and the Dutch Research Council and reviewed manuscripts for many prestigious medical and public health journals.

External Reviewers:
Reviewer A: "My view is that Dr. Colabianchi is a productive, well-funded scholar whose research is highly innovative and has had a real impact on her field and public practice. She collaborates with School colleagues, other units on campus, and top scholars across the country. She has, therefore, exceeded the criteria for promotion to Professor with tenure. In fact, I have conducted nearly 50 external reviews for promotion and this was one of the top 3 or 4 packets that I have read. I am honestly not sure what else you could ask from an Associate Professor and I would expect her to be promoted easily at any of the top programs in the country."

Reviewer B: "What is even more impressive than her record of scholarly publications, is her grant-writing ability. Dr. Colabianchi has been a PI, co-PI, or co-investigator on over $10 million of external grants from agencies like the National Institutes of Health (NIH) the Robert Wood Johnson Foundation (RWJF). Her level of scholarly productivity and funding success is highly unusual, and places her in the top 5% of investigators at a similar level of professional development. In short, I would estimate Dr. Colabianchi's standing in relation to others in her peer group to be in the top 5%."

Reviewer C: "First the productivity in publication far exceeds what is normally expected from academics. She has published an average of nearly 10 papers per year for the last 5 years. Second, she has mentored many graduate students and allowed them to take a lead role in publication, leaving her as the senior author on multiple publications— both very admirable. I also find her research to be of very good quality. She follows rigorous research methods and is searching for relationships between the built environment and individual behaviors. Her continuous NIH funding is testament to the adherence to the most current and rigorous methods and the importance of her studies. The line of research she pursues is critical for the improvement of public health, whose mission is to assure conditions in which people can be healthy. Only by identifying the environmental factors that promote health and well-being, and critical health behaviors like physical activity, will we be able to improve population health. Her work represents important contributions to the field."
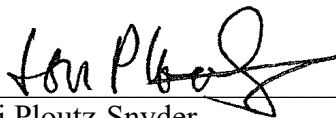
Reviewer D: "Her program of research is innovative, and she is contributing to the development and refinement of new and exciting methods, including the use of the GigaPan® for neighborhood audits and validating the EAPRS. Dr. Colabianchi's empirical investigations of how to define and describe neighborhoods demonstrate her intellectual leadership in the field. Her research has contributed to our understanding of the epidemics of physical inactivity and obesity and, importantly, has directed attention to the role of the environment in these growing public health challenges. This line of inquiry is crucial to the development of effective public

health interventions and policies, as interventions that focus solely on individual behaviour are woefully ineffective in the long term."

Reviewer E: "I have been most impressed with her creative, energetic approach to merging the fields of health behavior and public health to help further and refine our understanding of how aspects of the built environment are related to obesity and physical inactivity. Her more recent work on health disparities is extremely important as well. Her work is innovative and I believe meets the School of Kinesiology promotion standards for excellence in scholarship and in education."

Reviewer F: "Dr. Colabianchi is a leader in the field and she is recognized as such by leading agencies and organizations. Because of this, she has given numerous invited talks and participated in expert meetings. One of these is the National Collaboration of Childhood Obesity Research (NCCOR), a partnership of the four leading funding agencies in the U.S. that focus on health and well-being (NIH, CDC, RWJF, and U.S. Department of Agriculture), invited her to present at an expert meeting on neighborhood factors that influence childhood obesity. Dr. Colabianchi gave a presentation on the state of the research for neighborhood audits, the challenges in the field, and recommendations for moving the discipline forward. I am familiar with NCCOR and I know that they only invite leaders in the field to present at their expert meeting; thus, I am not surprised that Dr. Colabianchi presented at a NCCOR meeting. In fact, I would have been more surprised if she had not been invited to present at a NCCOR meeting!"

Summary of Recommendation: Professor Colabianchi's aggregate achievements in research, teaching, and service have resulted in strong and enthusiastic support at all levels in our school. In addition, her work is elucidating some of the reasons for health disparities; there is no better time in our nation's history to tackle these difficult issues. The University of Michigan is better because of people like Professor Colabianchi. It is with the support of the School of Kinesiology Executive Committee that I recommend Natalie Colabianchi for promotion to professor of kinesiology, with tenure, School of Kinesiology.

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Lori Ploutz-Snyder
Dean, School of Kinesiology

May 2021