PROMOTION RECOMMENDATION The University of Michigan School of Public Health Department of Health Behavior and Health Education

Brian J. Zikmund-Fisher, associate professor of health behavior of and health education, Department of Health Behavior and Health Education, School of Public Health, is recommended for promotion to professor of health behavior and health education, with tenure, Department of Health Behavior and Health Education, School of Public Health.

Academic Degrees:

Ph.D.	2002	Carnegie Mellon University
M.A.	1996	Carnegie Mellon University
B.A.	1991	Swarthmore College

Professional Record:

2014 – Present	Associate Professor with Tenure, Department of Health Behavior and Health Education, School of Public Health, University of Michigan
2014 - Present	Research Associate Professor, Department of Internal Medicine,
	University of Michigan School of Medicine
2009 - 2014	Assistant Professor, Department of Health Behavior and Health Education,
	School of Public Health, University of Michigan
2007 - 2014	Research Assistant Professor, Department of Internal Medicine,
	University of Michigan School of Medicine
2004 - 2007	Research Investigator, Department of Internal Medicine,
	University of Michigan School of Medicine
1997 – 1999	Coordinator of TA Support, Eberly Center for Teaching Excellence,
	Carnegie Mellon University

Summary of Evaluation:

Teaching – Since becoming an associate professor in 2014, Professor Zikmund-Fisher has maintained a good teaching record. In the Department of Health Behavior and Health Education, he developed and teaches two courses on health communications, HBHED 661: Designing "Sticky" Communications and HBHED 662: Risk Communications, which have enrollments of 40-50 students annually. His course evaluations are consistently very good, ranging from 4 to 4.9 over 5 years. Average evaluation scores for HBHED 662: Risk Communications are 4.40 for Q1 and 4.60 for Q2. Average evaluation scores for HBHED 661: Designing "Sticky" Communications over five offerings are 4.50 for Q1 and 4.62 for Q2. In 2016-2018, Professor Zikmund-Fisher led the professional development and capstone courses for the Health Behavior and Health Education M.P.H. program, attended by ~50 students, during a period when these courses were being restructured, and received lower evaluation scores (2-3 on a 1-5 point scale for Q1 and Q2). In fall 2018, coincident with the overhaul of the core M.P.H. curriculum in the School of Public Health, Professor Zikmund-Fisher developed and taught PUBHLTH 510: Communications Fundamentals, a 1-credit course taken by all entering first-year M.P.H. students that incorporates a 'flipped' classroom format. He has also adapted this course to be a part of the school's new online M.P.H. in population sciences, offered in 2019-2020. Professor Zikmund-Fisher received the Henry Russel Award, the University of Michigan's highest university-wide award given to junior faculty members for "exceptional scholarship and conspicuous ability as a teacher" in 2015. He has chaired or co-chaired five dissertation committees, two of these since 2014. He also has mentored several postdoctoral fellows and junior faculty and served as advisor for six to ten M.P.H. students annually. Ph.D.

students and research fellows are lead or co-authors on 12 of the 82 peer-reviewed manuscripts published by Professor Zikmund-Fisher since 2014.

Scholarship - Professor Zikmund-Fisher's research program relies on his interdisciplinary background in decision psychology and behavioral economics in order to consider factors that affect individual decision making about health and medical issues. His primary research themes center on increasing the usability of health data and exploring the role of medical maximizing-minimizing tendencies in healthcare decisions. Through his Agency for Healthcare Research and Quality funded R01, Professor Zikmund-Fisher developed and tested novel visual displays for communicating laboratory test results to patients to maximize their evaluability, e.g., meaningfulness. His paper based on this research, "Graphics help patients distinguish between urgent and non-urgent deviations in laboratory test results" in the Journal of the American Medical Informatics Association, was one of the 10 most downloaded papers in that journal in 2017. Professor Zikmund-Fisher's research on the mismatch between what health care people need-and what they choose to get--operationalized the concept that individuals can be "medical maximizers" or "minimizers" by developing and validating a Medical Maximizing-Minimizing Scale (MMMS). He also has conducted substantial research and published widely on secondary themes including: 1) pros and cons of using narratives in health communications; 2) novel methods of improving health science communication, such as improvisation-based skill building exercises; and 3) non-use of health risk/benefit information by patients and the public.

Professor Zikmund-Fisher's research has been solidly funded at rank and reflects numerous productive collaborations as a co-investigator and a commitment to team science. Currently, he is a co-investigator on six awards. During his appointment as associate professor, he was a co-principal investigator of a National Science Foundation funded grant from 2016-2018, held a R01 grant from the Agency for Healthcare Research and Quality as the principal investigator from 2013-2017, and served as a consultant or co-investigator on numerous other grants. Professor Zikmund-Fisher has demonstrated high levels of research productivity, particularly in terms of publications. In total, he has published 160 papers, 82 since his promotion to associate professor (35 of the latter as first or last author). Many of his papers have appeared in leading, high-impact journals in his field, including: *Medical Decision Making, Journal of Adolescent Health, Journal of Health Communication, PLoS ONE*, and *American Journal of Preventative Medicine*. He has also co-authored six chapters in books or online resource documents (four since his promotion to associate professor, including two as first author) and co-authored a Report from the National Academies of Sciences, Engineering and Medicine in 2018.

Recent and Significant Publications:

- Zikmund-Fisher, B.J. (2019) Helping people know whether measurements have good or bad implications: increasing the evaluability of health and science data communications. *Policy Insights from the Behavioral and Brain Sciences*. 6(1):29–37. doi: 10.1177/2372732218813377
- Scherer, L.D., Kullgren, J.T., Caverly, T., Scherer, A.M., Shaffer, V.A., Fagerlin, A., Zikmund-Fisher, B.J. (2018) Medical maximizing-minimizing preferences predict responses to information about prostate-specific antigen screening. *Medical Decision Making*. Aug;38(6):708-718. doi: 10.1177/0272989X18782199
- Aurbach, E.L., Prater, K.E., Patterson, B., Zikmund-Fisher, B.J. (2018) Half-life your message: a quick, flexible tool for message discovery. *Science Communication*. 40(5):669-677. doi: 10.1177/1075547018781917
- Zikmund-Fisher, B.J., Scherer, A.M., Witteman, H.O., Solomon, J., Exe, N.L., Tarini, B.A., Fagerlin, A. (2017) Graphics help patients distinguish between urgent and non-urgent deviations in laboratory test results. *Journal of the American Medical Informatics Association*. 24(3):520-528. doi:10.1093/jamia/ocw169

Zikmund-Fisher, B.J., Kullgren, J.T., Fagerlin, A., Klamerus, M.L., Bernstein, S.J., Kerr, E.A. (2017) Perceived barriers to implementing individual Choosing Wisely® recommendations in two national surveys of primary care providers. *Journal of General Internal Medicine*. 32(2):210-7. doi: 10.1007/s11606-016-3853-5

Service – Professor Zikmund-Fisher has a well-established record of service at all levels since his promotion to associate professor. Since 2014, he has chaired the departmental admissions committee and served as a member of the curriculum committee. In his capacity as admissions committee chair, Professor Zikmund-Fisher created new procedures to enable more students from varied backgrounds to attend the HBHE M.P.H. program. He also served on a department faculty search committee in 2015-16. At the school level, Professor Zikmund-Fisher represents the School of Public Health in all curriculum and admissions decisions for the Masters of Health Informatics program. His university service includes serving as a member of the Health Sciences and Behavioral Sciences Institutional Review Board (IRB-HSBS) since 2015 and the Faculty Advisory Committee for the University-wide Precision Health Initiative since 2018. He also was the interim co-director of the Center for Bioethics and Social Sciences in Medicine (CBSSM) in 2016-2017, and remains an associate director of CBSSM, directing the postdoctoral fellowship program. Professor Zikmund-Fisher has an extensive record of service at the national level. From 2013 to 2016, he was an elected trustee of the Society for Medical Decision Making (SMDM), the primary academic society for his area of research, and then served as an associate editor for both of the SMDM's journals, Medical Decision Making and Medical Decision Making: Policy and Practice before being appointed as the editor-in-chief in October 2019. In addition, Professor Zikmund-Fisher has been the editor-in-chief of the SMDM quarterly newsletter since 2018. He was appointed as a member of the 2017-2018 National Academies of Science, Engineering, and Medicine Committee on the return of individual-specific research results and is a consultant to the Risk Communication Advisory Committee of the U.S. Food and Drug Administration.

External Reviewers:

Reviewer (A): "...the maximizing-minimizing work may prove to be his most fundamental and lasting contribution. Taken in total, (his) scholarly work places him in the front rank of behavioral and health communications scientists."

Reviewer (B): "Dr. Zikmund-Fisher's application provides evidence of a sustained and rigorous academic who is able to contribute significantly to an organisation as a leader of both research and education, with outputs that impact on society through collaboration with stakeholders in health policy, practice and experience."

Reviewer (C): "He has been involved in more than 150 publications appearing in a wide array of journals including some high visibility journals. ... The volume published and quality of outlets are both significant indicators of the quality of mind and of the productivity of the candidate. It is an impressive listing of research scholarship."

Reviewer (D): "His work is impressive for its sheer volume, the number of collaborators he has engaged on a variety of issues relating to health and risk communication and the importance of the problems he had addressed over nearly two decades."

Reviewer (E): "He is perhaps the leader in expanding the field of risk communication to the broader agenda of improving how we draw meaning from health data, both qualitative and quantitative."

Reviewer (F): "Dr. Zikmund-Fisher is an outstanding researcher with high national and international visibility. I consider him one of the very top experts in risk communication in the world."

Reviewer (G): "He is definitively a leader! He is tremendously respected by his peers as reflected by all the collaborations he has established. Everyone asks for his help to development the communications aspects of their fundamental projects. He is considered an expert in his research with no doubt at all."

Reviewer (H): "My impression...is that Brian conducts his research at the highest quality and rigor, and with the imagination and novel thinking that not many other researchers in his field are gifted with."

Reviewer (I): "Dr. Zikmund-Fisher is among the top researchers in his field, widely recognized around the world for his expertise in risk communication and medical decision making (and attendant domains, such as numeracy and visual aids). Even though I am familiar with his work, I was astounded at the incredible range of public health and medical topics that he has worked on."

Reviewer (J): "...he is arguably the leading expert on this field (risk communication) in the world"

Reviewer (K): "Dr. Zikmund-Fisher conducts some of the most impactful, novel, creative research in applied decision making and risk communication in the field today...I consider Dr. Zikmund-Fisher the leading expert in communication of probabilities and risk information in the field of medical decision making."

<u>Summary of Recommendation</u>: Professor Zikmund-Fisher is a leading scholar with internationally recognized expertise in decision making and communication challenges that prevent patients, providers, and policy makers from making better health decisions and living healthier lives. He complements his expertise with collaborations that focus on helping decision makers themselves by understanding how to tailor communications to their underlying preferences for care and to their need to understand the health experiences about which they are making decisions. He utilizes these collaborations to facilitate broad dissemination of evidence-based communication techniques across health fields and into practice. Professor Zikmund-Fisher has made unique and significant contributions through his research and publications, secured external funding to support his research, received strong teaching evaluations, and provided leadership and service to the department, school, university and his profession. It is with the support of the School of Public Health Executive Committee that we recommend Brian J. Zikmund-Fisher for promotion to professor of health behavior and health education, with tenure, Department of Health Behavior and Health Education, School of Public Health.

F. DuBois Bowman, Ph.D Dean, School of Public Health

May 2020