# PROMOTION RECOMMENDATION THE UNIVERSITY OF MICHIGAN MEDICAL SCHOOL DEPARTMENT OF SURGERY DEPARTMENT OF PATHOLOGY DEPARTMENT OF BIOMEDICAL ENGINEERING

Jacqueline S. Jeruss, M.D., Ph.D., associate professor of surgery, with tenure, Department of Surgery, associate professor of pathology, without tenure, Department of Pathology, Medical School, and associate professor of biomedical engineering, without tenure, Department of Biomedical Engineering, Medical School and College of Engineering, is recommended for promotion to professor of surgery, with tenure, Department of Surgery, professor of pathology, without tenure, Department of Pathology, Medical School, and professor of biomedical engineering, without tenure, Department of Biomedical Engineering, Medical School and College of Engineering.

### Academic Degrees:

Ph.D.	2003	Northwestern University, Evanston, IL
M.D.	1997	University of Vermont, Burlington, VT
B.A.	1993	Brandeis University, Waltham, MA

### **Professional Record:**

2014-present	Associate Professor of Pathology, University of Michigan	
2014-present	Associate Professor of Surgery, University of Michigan	
2014-present	Associate Professor of Biomedical Engineering, University of Michigan	
2014-2018	Adjunct Associate Professor of Obstetrics and Gynecology, Northwestern	
	University	
2013-2014	Associate Professor of Surgery, Northwestern University	
2006-2013	Assistant Professor of Surgery, Northwestern University	
2005-2006	Clinical Specialist, M.D. Anderson Cancer Center, Houston, TX	

## **Summary of Evaluation:**

Teaching: Dr. Jeruss is a dedicated teacher and has mentored over 70 undergraduates, graduate and medical students, residents and post-doctoral fellows. She teaches in the clinical setting and operating room, gives didactic lectures on the management of benign and malignant breast diseases, and is the course director of Surgical Ethics. She is the director of the Polly Suk-Yee Cheung Breast Surgical Oncology Fellowship, for which she secured the endowment. Dr. Jeruss developed the current core educational objectives for this specialty fellowship training, and is the co-director with Dr. Mark Perlman for the Cancer Genetics and Breast Health Fellowship; teaching the obstetric and gynecology trainees about the management of breast diseases and cancer. Dr. Jeruss has been a member of five dissertation committees, and received the American College of Surgeons Outstanding Mentor of the Year Award by the American College of Surgeons in 2019. She directs Undergraduate Research Opportunity Program students, medical students, and T-32 research fellow recipients in basic science laboratory investigation of metastatic disease, immunotherapy, and fertility preservation, and provides guidance on manuscript preparation. She

is a member of the Breast Program Directors Subcommittee for the Society of Surgical Oncology, and an examination consultant for Complex General Surgical Oncology for the American Board of Surgery.

Research: Dr. Jeruss is a highly productive and internationally recognized clinician-scientist. Her research program includes the study of tumor suppression and novel therapeutics for aggressive breast cancer subtypes, detection of early metastatic events using novel bioengineered technologies, and preservation of fertility for young patients with cancer. Dr. Jeruss' research has led to more than 75 publications in peer-reviewed top-tier journals, including the New England Journal of Medicine, Journal of Clinical Oncology, Annals of Surgical Oncology, and Nature Communications. Throughout her career, Dr. Jeruss has steadily received research funding from the National Institutes of Health, foundations, industry and institutions. She has been a highly sought-after researcher, with 62 invited presentations regionally, nationally and internationally to her credit.

# Recent and Significant Publications:

Shah NM, Scott DM, Kandagatla P, Moravek MB, Cobain EF, Burness ML, Jeruss JS: Young Women with breast cancer: Fertility preservation options and management of pregnancy-associated breast cancer. *Ann Surg Oncol* May:26(5):1214-1224. 2019.

Rao SS, Stoehr J, Dokic D, Wan L, Decker JT, Konopka K, Thomas AL, Wu J, Kaklamani VG, Shea LD, Jeruss JS: Synergistic effect of eribulin and CDK inhibition for the treatment of triple negative breast cancer. *Oncotarget* 8(48): 83925-83939, 2017.

Rao SS, Bushnell GG, Azarin SM, Spicer G, Aguado BA, Stoehr JR, Jiang EJ, Backman V, Shea LD, Jeruss JS: Enhanced survival with implantable scaffolds that capture metastatic breast cancer cells in vivo. *Cancer Res* 76(18): 5209-18, 2016.

Llarena NC, Estevez SL, Tucker SL, Jeruss JS: Impact of fertility concerns on tamoxifen initiation and persistence. *J Natl Cancer Inst.* 107(10): 2015.

Azarin SM, Yi J, Gower RM, Aguado BA, Sullivan ME, Goodman AG, Jiang EJ, Rao SS, Ren Y, Tucker SL, Backman V, Jeruss JS, Shea LD: In vivo capture and label-free detection of early metastatic cells. *Nat Commun* 6: 8094, 2015.

Service: Dr. Jeruss is an extremely active member of international, national and institutional committees. She is a grant reviewer for A Sister's Hope, an editorial board member of the Annals of Surgical Oncology, and also serves as an ad hoc reviewer for 15 journals. Nationally, she serves on the American College of Surgeons Owen H. Wangensteen Scientific Forum Committee, the American Society of Clinical Oncology Scientific Program Breast Cancer Local/Regional/Adjuvant Committee, Society of Surgical Oncology Breast Program Directors Subcommittee, and as an examination consultant for the American Board of Surgery, Complex General Surgical Oncology. She is a standing member of an NIH study section and has served on five additional study sections. Institutionally, Dr. Jeruss is the director of the Breast Care Center at the Rogel Cancer Center leading an interdisciplinary team on the treatment options for patients. She provides compassionate care and education to assist with making informed care choices to

patients. Dr. Jeruss is also the director for a basic science laboratory, guiding the interdepartmental team in the translational research investigation of further developing the prevention and treatment of breast disease.

### **External Reviewers:**

Reviewer A: "I have reviewed all the materials provided and can state confidently that in my opinion, Dr. Jeruss is 'well over the bar' for promotion to the rank of professor at Michigan or any other institution in the United States. I base this opinion on my experiences as a member of the Professorial Promotion Committee at [my former institution] and subsequently as a Chair of Surgery at [my former institution] and at [my current institution] where I have coordinated and supervised the promotions of dozens of surgical faulty to the rank of Professor...Dr. Jeruss is a true surgical scientist with an impressive track record of NIH funding and numerous high-impact publications."

Reviewer B: "Dr. Jeruss is a recognized expert in breast surgery... I have directly observed Dr. Jeruss at both national and regional meetings. Her presentations are informative and interactive. Her interactions with learners, including residents, are professional. She is approachable and enthusiastically teaches learners."

Reviewer C: "Her most important research has been focused on developing a scaffold to identify and capture early metastatic cancer cells. In fact, her team was the first to demonstrate the capacity for a bioengineered scaffold to serve as a metastatic niche for patients with invasive breast cancer and subsequently demonstrated that removal of the primary tumor in this setting may improve outcomes. This outstanding work has important implications for potential therapeutic intervention for patients with not only breast cancer but other solid tumors in the future. In relation to her peers, I would argue that Dr. Jeruss is certainly in the top 5% with regard to her scholarly endeavors including productivity and impact."

Reviewer D: "I believe that Dr. Jeruss is a superior academic breast surgical oncologist with a mature track record of focused basic science and translational research...Her funded proposals are impressive in scope and detail and show great promise as a potential frontier to define mechanisms and patterns of metastatic dissemination in breast cancer. Dr. Jeruss has an impressive record of peer-reviewed publications in high-impact journals that have changed and altered practice in the field."

Reviewer E: "Dr. Jeruss has served on multiple NIH Study Sections and Panel Reviews, a very clear indication of the regard in which she is held nationally. These are prestigious appointments, especially her current role as a standing member (2015-2021) of the NIH NCI-I Study Section...The fact that Dr. Jeruss would pursue a T32 in parallel with her own basic science projects speaks volumes to her dedication to the teaching mission and her interest and desire to train the next generation of surgeon-scientists. I also note that from April to July of 2019, she submitted 4 NIH-DHHS grants as Co-PI, 3 more as a Co-I with effort, and is apparently part of yet another as Co-I without effort, which has been scored at the 1st percentile. This level of productivity is beyond impressive, especially in such a compacted time frame."

Reviewer F: "Her health care/clinical acumen also extends to the development of a unique expertise in a vitally important area; that of oncofertility for young breast cancer patients. This is likely an under-recognized aspect of her dossier and one I think is critically important...She adopted this topic and area of interest and has persistently moved this important issue to the forefront in the care of young surgical patients through lecturers, participation on key ethics committees and through scholarly publications (Ann Surg Onc and NEJM)."

# Summary of Recommendation:

Dr. Jeruss is an internationally renowned clinician-scientist respected for her seminal contributions in breast cancer research. She is highly respected as a superb teacher and expert surgeon. Her service contributions are exemplary. We are pleased, therefore, to recommend Jacqueline S. Jeruss, M.D., Ph.D. for promotion to professor of surgery, with tenure, Department of Surgery, professor of pathology, without tenure, Department of Pathology, Medical School, and professor of biomedical engineering, without tenure, Department of Biomedical Engineering, Medical School and College of Engineering.

Marschall S. Runge, M.D., Ph.D.

**Executive Vice President for Medical Affairs** 

Marchel S. Runge

Dean, Medical School

Alec D. Gallimore, Ph.D.

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Robert J. Vlasic Dean of Engineering

College of Engineering

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