PROMOTION RECOMMENDATION The University of Michigan School of Dentistry

Brent B. Ward, associate professor of dentistry, with tenure, School of Dentistry, and associate professor of surgery, without tenure, Medical School, is recommended for promotion to professor of dentistry, with tenure, School of Dentistry, and professor of surgery, without tenure, Medical School.

Academic Degrees:

Fellowship	2003	University of Michigan, Medical School
MD	2001	University of Michigan, Medical School

DDS 1991 University of Southern California, School of Dentistry

Professional Record:

2016-Present Associate Professor, Department of Surgery, Section of Oral and

Maxillofacial Surgery, University of Michigan Medicine

2012-Present Associate Professor, Oral and Maxillofacial Surgery, University of Michigan

School of Dentistry

2003-2015 Lecturer, Oral and Maxillofacial Surgery/Oncology, University of Michigan

Medicine

2003-2012 Assistant Professor, Oral and Maxillofacial Surgery, University of Michigan

School of Dentistry

Summary of Evaluation:

Teaching: Professor Ward has a strong passion for teaching and patient care. With respect to resident education, he was the oral and maxillofacial surgery residency program director (2003-2009), and is currently the director of the head and neck oncology and reconstruction fellowship program (since 2003). He teaches extensively at multiple levels including pre-doctoral dental students, oral surgery residents, and oncology fellows. He is a guest lecturer in four pre-doctoral didactic courses, and an instructor in one graduate didactic course and two clinical courses both at the pre-doctoral level. Additionally, Professor Ward is a guest lecturer in two courses at Brigham Young University. Professor Ward is a highly active research mentor. He has been an advisor to 17 postdoctoral trainees and he has given eight continuing education courses. His teaching evaluations from students and peers are stellar making it clear that his students appreciate his passion for teaching and engage in learning as a result. Professor Ward's teaching style is interactive and thought-provoking. One effective teaching method Professor Ward uses is asking his students to put themselves in the cancer patients' role and asking them what their concerns would be. The students praise him for being knowledgeable, patient, helpful, and giving good advice on clinical procedures. His peers praise him for his presentation style, commitment to teaching, and supportive outlook to all students. His philosophy describes a thoughtful approach to teaching that considers the importance of independent learning, respect, role modeling, and critical thinking.

Professor Ward is recognized by students and peers on the national and international level for his exceptional high quality of teaching. Perspective oral surgery residents and head and neck oncology fellows seek out Michigan for the opportunity to learn from Professor Ward. Many of Professor Ward's students have gone into leadership positions in head and neck oncology and other academic and community practices, which is a direct reflection of Professor Ward's strong leadership and mentoring. His passion for teaching goes beyond the classroom and clinic. He is an examiner for the

American Board of Oral and Maxillofacial Surgery and he has been a critical member of the faculty of the American Academy of Oral and Maxillofacial Surgery (AAOMS) sponsored Research Summit program for junior investigators.

Research: Professor Ward's clinical research focus is in oral head and neck surgery, microvascular surgery, reconstruction surgery, microneurosurgery and steonecrosis of the jaw. His scientific research focus is drug delivery, nanotechnology and cancer diagnostics. He has 36 peer-reviewed publications, of which he is first author on three and senior author on fourteen. Professor Ward has 27 book chapters, 17 of which were published in rank. He has been continuously funded since 2002, and currently has four grants totaling almost \$10 million dollars, and he is the principal investigator on two of these grants. He is extremely collaborative in his research program with many coinvestigator roles, which speak highly of his contributions, work ethic, and productivity as a clinician scientist. Professor Ward brings exceptional leadership skills in organizing his studies, particularly in the area of head and neck oncology. His leadership skills have also been instrumental in establishing a clinical trials course for both the American Association of Oral and Maxillofacial Surgeons and the International Associations of Oral and Maxillofacial Surgeons. This course has been pivotal for a significant number of participants in achieving funding for their research projects. Professor Ward is sought out by other institutions and organizations to provide his expert knowledge in oral head and neck cancer, microvascular reconstruction, and drug delivery. He has 39 invited presentations at professional meetings, conferences and medical schools and institutions.

Professor Ward is an extremely talented independent research and team scientist. His research is timely and impactful. His work with co-collaborators and student mentors contributes greatly to patient care at the University of Michigan, and advances the specialty of oral and maxillofacial surgery in the focused area of oral/head and neck cancer and reconstructive surgery.

Recent and Significant Publications:

- Dashow Je, McHugh JB, Braun TM, Edwards SP, Helman JI, Ward BB. Significantly Decreased Recurrence Rates in Keratocystic Odontogenic Tumor with Simple Enucleation and Curettage Using Carnoy's Versus Modified Carnoy's Solution. *J Oral Maxillofac Surg.* Nov; 73(11):2132-5, 2015
- Brockfoff HC 2nd, Kim RY, Braun TM, Skouteris C, Helman J, Ward BB. Correlating the Depth of Invasion at Specific Anatomic Locations with the Risk of Regional Metastatic Disease to Lymph Nodes in the Neck for Oral Squamous Cell Carcinoma. *Head Neck*. May; 39(5):974-979, 2017
- S.Y. Lee, J.M. Pakela, M.C. Helton, K. Vishwanath, Y.G. Chung, N.J. Kolodziejski, C.J. Staples, D.R. McAdams, D.E. Fernandez, J.F. Christian, J. O'Reilly, D. Farkas, B.B. Ward, S.E. Feinberg, M.-A. Mycek: Compact Dual-mode Diffuse Optical System for Blood Perfusion Monitoring in a Porcine Model of Microvascular Tissue Flaps. *J Biomedical Optics*. Dec; 22(12):1-14, 2017
- Dillon JK, Villing AS, Jones RS, Futran ND, Brockhoff HC 2nd, Carlson ER, Schlieve T, Kademani D, Patel K, Claiborne ST, Direks EJ, Ying YP, Ward BB, What Is the Role of Elective Neck Dissection in the Management of Patients With Buccal Squamous Cell Carcinoma and Clinically Negative Neck Findings? J *Oral Maxillofac Surg.* Mar; 77(3):641-647, 2019
- Moe, J, Mchugh J, Udager A, Braun T, Helman JI, Ward BB, Intraoperative Depth of Invasion is Accurate in Early State Oral Cavity Squamous Cell Carcinoma. *J Oral Maxillofac Surg*. Aug; 77(8):1704-1712, 2019

<u>Service:</u> Professor Ward serves as the department chair of the Oral and Maxillofacial Surgery/Hospital Dentistry department at the School of Dentistry, and section head of the Oral and Maxillofacial Surgery, Michigan Medicine. Additionally, he is the program director for the Oral

Head and Neck Oncology and Microvascular Reconstructive Surgery Fellowship programs at Michigan Medicine. He is a leader in the field of Oral and Maxillofacial Surgery holding numerous important positions on the national level. He is on many AAOMS committees including the Special Committee on Maxillofacial Oncology and Reconstructive Surgery, Committee on Resident Education and Training, Oral and Maxillofacial Surgery Faculty Selection Executive Committee, and is the chair of the Oncology Research Interest Group. He has held major roles as an Oral Examination Committee co-chair for the American Board of Oral and Maxillofacial Surgery. He is an editorial board member of the Journal of Oral and Maxillofacial Surgery, and is the presidentelect of the American Academy of Craniomaxillofacial Surgery, of which he is a founding member. On the international level, he has served on the World Congress of International Academy of Oral Oncology, was the co-chair at the Oral Abstracts on Reconstructive Surgery Symposium. He is a site visitor for the Commission on Dental Accreditation, a regular manuscript reviewer on four major scientific journals, and an ad hoc reviewer for many others. At the University of Michigan Professor Ward is on the Comprehensive Cancer Center Head and Neck Oncology Program, Surgery Advisory Committee, Head and Neck Tumor Board, Perioperative Quality Improvement Committee and the OR/Procedural Supply Chain Optimization group.

Professor Ward created a database repository, Maxillofacial Oncology and Reconstructive Surgery Database, for national collaboration and formalized data sharing for other institutions which has positioned Professor Ward nationally and internationally as an expert in data capture. The clinical significance of this database is for answering clinical questions based on data collected from patient experiences. This has led to significant cancer patient treatment publications including, in some cases, the ability to minimize the surgical protocol and spare the patient from extensive surgery. He also created an instructional video for post-doctoral applicants for the American Association of Oral and Maxillofacial Surgeons website. These activities are only a few of Professor Ward's entrepreneurial initiatives that help to improve resources for the field of Oral and Maxillofacial Surgery and Maxillofacial Oncology and Reconstructive Surgery.

External Reviewers:

Reviewer A: "Dr. Ward is an accomplished surgeon who treats patients with oral/head and Neck Cancer, and is a very sought after clinician by patients from across the state of Michigan and beyond... He is a successful clinician scientist who performs impactful research, collaborates with faculty, mentors students and residents, contributes greatly to patient care at the University of Michigan, and advances the specialty of Oral and Maxillofacial Surgery."

Reviewer B: "Dr. Ward has prioritized research with an excellent track record of internal and external collaboration and NIH funded projects. His uninterrupted history of funding dates back to 2007, and largely centers around translational efforts to improve the lives of patients directly through reconstruction, cancer therapeutics, and most recently, opioid mitigation."

Reviewer C: "His history in grant participation and publishing in the field of oncology and reconstruction has been outstanding among his peers. His funding history is highly impressive with millions of dollars in grants studying topics ranging from oncology to pain management."

Reviewer D: "Dr. Ward has been a mentor to a number of students as well as residents during his tenure at Ann Arbor. Many of his students and residents have become leaders in the field of oral and maxillofacial surgery. It is interesting to note that Dr. Ward consistently receives high honors from his students as well as his residents. His evaluations are quite impressive."

Reviewer E: "Dr. Ward's contributions in the area of professional service are nothing less than extraordinary. He has served virtually every major professional organization in the field of oral and maxillofacial surgery in numerous leadership roles."

Reviewer F: "As a national leader in Oral and Maxillofacial Surgery, Dr. Ward has been given significant teaching and mentorship responsibility. As I look at the names of his fellowship graduates and junior co-authors, I see the future leaders in the field of Oral and Maxillofacial Surgery. There is a reason that the development and implementation of our specialties first Clinical Trials Methods Course for early faculty and first Women in Oral and Maxillofacial Surgery event were found to take place at the University of Michigan, which is a reflection of Dr. Ward's leadership."

Reviewer G: "Dr. Ward has an international and national reputation and is held in high esteem by colleagues throughout the world, as evidenced by his contributions to international lectures, programs and conferences."

Summary of Recommendation:

Professor Ward is a gifted surgeon, a talented clinician scientist, a superb educator and a remarkable servant leader. He has shown to be a champion of diversity and has specifically worked to bring gender equality and inclusion to oral and maxillofacial surgery. He recently sponsored and supported the first Women in Oral and Maxillofacial Surgery Symposium held at the University of Michigan and participated in similar events for the Department of Surgery. Under his guidance, the faculty section program at the American Association of Oral and Maxillofacial Surgeons annual meeting will be the first all-female presenters program this year. Professor Ward is highly committed to the training of future oral and maxillofacial surgeon professionals, both as a dentist-surgeon and scientist. It is with the support of the Executive Committee, that we recommend Brent B. Ward for promotion to professor of dentistry, with tenure, School of Dentistry, and professor of surgery, without tenure, Medical School.

Laurie K. McCauley

Dean, School of Dentistry

San 1. McCanly

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

Executive Vice President for Medical Affairs

Warwell S. Runge

Dean, Medical School