PROMOTION RECOMMENDATION THE UNIVERSITY OF MICHIGAN MEDICAL SCHOOL DEPARTMENT OF OTOLARYNGOLOGY-HEAD AND NECK SURGERY DEPARTMENT OF PHARMACOLOGY

John C. Brenner, Ph.D., assistant professor of otolaryngology-head and neck surgery, Department of Otolaryngology-Head and Neck Surgery, and assistant professor of pharmacology, Department of Pharmacology, Medical School, is recommended for promotion to associate professor of otolaryngology-head and neck surgery, with tenure, Department of Otolaryngology-Head and Neck Surgery, and associate professor of pharmacology, without tenure, Department of Pharmacology, Medical School.

Academic Degrees:

Ph.D.	2012	University of Michigan
M.S.E.2007		University of Michigan
B.S.E.	2006	University of Michigan

Professional Record:

2017-present	Assistant Professor of Pharmacology, University of Michigan
2013-present	Assistant Professor of Otolaryngology-Head and Neck Surgery
	University of Michigan

Summary of Evaluation:

<u>Teaching</u>: Dr. Brenner has mentored 55 undergraduate, graduate and post-doctoral students. Many of these mentees have published peer-reviewed articles and have successfully matriculated into post-graduate positions and faculty positions. All four of his Ph.D. trainees have received extramural fellowships and one of his mentees was awarded the ProQuest Distinguished Dissertation Award in 2020. Dr. Brenner has significant teaching experiences leading several individual study courses, ethics courses, as well as teaching Grant Writing, Pharmacology 502, PIBS 503, and General Cancer Biology 554, and Cellular and Molecular Biology 850. He has also lectured in both the Cancer Center and hematology/oncology grand rounds series at the University of Michigan. Dr. Brenner is highly regarded by his learners with outstanding scores on his teaching evaluations.

<u>Research</u>: Dr. Brenner's research focuses on precision medicine in head and neck cancer, specifically in designing therapeutic approaches to overcome drug resistance. He has made an important link in targeting PI3K inhibitor resistance mechanisms to inducing an immunotherapy susceptible state. Dr. Brenner has been well-funded for his research and is currently the principal investigator of an American Cancer Society grant, and a co-principal investigator of an NIH U01 grant. He is also a co-investigator of six additional grants, which evidences his collaboration efforts. Dr. Brenner has published 82 peer-reviewed articles, and has been invited to present his research on 13 occasions nationally and internationally. He holds one patent.

Recent and Significant Publications:

Mann JE, Kulkarni A, Birkeland AC, Kafelghazal J, Eisenberg J, Jewell BM, Ludwig ML, Spector ME, Jiang H, Carey TE, Brenner JC: The molecular landscape of the University of Michigan laryngeal squamous cell carcinoma cell line panel. *Head Neck* 41(9): 3114-3124, 2019. PM31090975/PMC6692232

Michmerhuizen NL, Leonard E, Matovina C, Harris M, Herbst G, Kulkarni A, Zhai J, Jiang H, Carey TE, Brenner JC: Rationale for Using Irreversible Epidermal Growth Factor Receptor Inhibitors in Combination with Phosphatidylinositol 3-Kinase Inhibitors for Advanced Head and Neck Squamous Cell Carcinoma. Mol Pharmacol 95(5):528-536, 2019. PM30858165/PMC6442321

Ludwig ML, Kulkarni A, Birkeland AC, Michmerhuizen NL, Foltin SK, Mann JE, Hoesli RC, Devenport SN, Jewell BM, Shuman AG, Spector ME, Carey TE, Jiang H, Brenner JC: The genomic landscape of UMSCC oral cavity squamous cell carcinoma cell lines. *Oral Oncol* 87: 144-151, 2018. PM30527230/PMC6349383

Mann JE, Smith JD, Birkeland AC, Bellile E, Swiecicki P, Mierzwa M, Chinn SB, Shuman AG, Malloy KM, Casper KA, McLean SA, Moyer JS, Wolf GT, Bradford CR, Prince ME, Carey TE, McHugh JB, Spector ME, Brenner JC: Analysis of tumor-infiltrating CD103 resident memory T-cell content in recurrent laryngeal squamous cell carcinoma. *Cancer Immunological Immunotherapy* 68(2): 213-220, 2018. PM30361882/PMC6375747

Birkeland AC, Foltin SK, Michmerhuizen NL, Hoesli RC, Rosko AJ, Byrd S, Yanik M, Nor JE, Bradford CR, Prince ME, Carey TE, McHugh JB, Spector ME, Brenner JC: Correlation of Crtc1/3-Maml2 fusion status, grade and survival in mucoepidermoid carcinoma. *Oral Oncol* 68: 5-8, 2017. PM28438292 /PMC5433350

<u>Service</u>: Dr. Brenner has served in important roles in many professional organizations within his field. He is currently a member of six different cancer societies including the Southwest Oncology Group (SWOG). He serves on the SWOG Early Therapeutics and Rare Cancers Committee, the Head and Neck Cancer Metastatic Recurrent Task Force of the National Cancer Institute, and the National Cancer Institute Immuno-Oncology Translational Network Steering Committee. Dr. Brenner is a reviewer for 28 journals and is an editor for *Cancers*. He has also served as a member of seven different grant review committees, including the European Research Area Network and the National Science Foundation. Institutionally, he is a member of several departmental committees, including service on a faculty search committee in the Department of Pharmacology. Dr. Brenner serves on the Central Biorepository Governance Committee, has served as the chair of the Cellular and Molecular Biology Ph.D. Admissions Committee, and several dissertation committees, as well as the dean's task force to develop a plan to optimize the number of graduate students in the Medical School.

External Reviewers:

<u>Reviewer A:</u> "Dr. Brenner has met all the criteria for advancement to the rank of Associate Professor including meritorious contributions to original research through independent and collaborative publications and funding. The greatest case for Dr. Brenner's promotion to Associate Professor of Surgery, with tenure, is he is in very exclusive and elite company with successful NIH funding as a co-PI on a U01 grant. Within the field of otolaryngology-head and neck surgery, only a very small minority of academic faculty can claim this distinction."

<u>Reviewer B:</u> "Dr. Brenner's work has contributed greatly to describing the genomic landscape of a variety of head and neck cancers and has explored the roles of dual tyrosine kinase receptor inhibition in inhibiting head and neck tumor growth. More recently, he has been developing immunotherapy approaches for head and neck cancers. Dr. Brenner is ideally situated in a busy clinical Department that has a long history of clinical and translational oncologic research excellence, and his work at the interface of bioinformatics, omics, and cancer biology makes him poised to make a huge impact as part of a large multi-disciplinary research team as a 'translational team scientist.'"

<u>Reviewer C:</u> "Dr. Brenner is a highly sought after educator and mentor in the head and neck academic community not only at the University of Michigan but also on regional, national, and international levels...Dr. Brenner has been a highly productive academic scholar. He has published 79 peer-reviewed articles in prominent journals, including *Oral Oncology, JAMA - Otolaryngology Head and Neck Surgery, The Oncologist, Neurooncology, Cellular Oncology, Laryngoscope*, and *Cancer*, not to mention the numerous Invited Reviews (14), with published abstracts and multiple other publications totaling over 40. Chad has also contributed 6 book chapters to medical literature."

<u>Reviewer D:</u> "In our field of head and neck cancer research, Dr. Brenner is considered one of the nationally recognized leaders for his scholarly contributions. His work on functional genomics to identify cancer vulnerabilities has not only been substantial in the efforts toward precision therapy but has also inspired a number of junior clinician-scientist investigators in their own career endeavors... Dr. Brenner's scholarship has also been recognized by peers reviewing grant applications at the federal level. He has been extremely successful in competing for prestigious grant opportunities."

<u>Reviewer E:</u> "By every other criteria---competitive grant funding, invited talks, reviewer, editorial board and study section service, membership in national NCI steering committees, honors and awards, and teaching and success of under graduate, graduate, and medical students and post docs,—he meets or exceeds the usual criteria for promotion to Associate Professor at leading Universities. At...he would soon be competitive for tenure and appointment as a Senior Investigator."

Summary of Recommendation:

Dr. Brenner has made a substantial impact on the field of otolaryngology through his head and neck cancer research. He is a successful mentor, instructor and leader, and I expect that he will continue to make highly impactful contributions to the department and university. I am pleased to recommend John C. Brenner, Ph.D. for promotion to associate professor of otolaryngology-head and neck surgery, with tenure, Department of Otolaryngology-Head and Neck Surgery, and associate professor of pharmacology, without tenure, Department of Pharmacology, Medical School.

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Marschall S. Runge, M.D., Ph.D. Executive Vice President of Medical Affairs Dean, Medical School

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