PROMOTION RECOMMENDATION The University of Michigan School of Dentistry

Cristiane H. Squarize, assistant professor of dentistry, School of Dentistry, is recommended for promotion to associate professor of dentistry, with tenure, School of Dentistry.

Academic	Degrees:

PhD	2005	Oral Pathology, University of Sao Paulo, Sao Paulo, Brazil
MSc	2003	Oral Pathology, University of Sao Paulo, Sao Paulo, Brazil
DDS	1995	Pontific Catholic University of Campinas, Campinas, Brazil

Professional Record:

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	2010 – Present	Assistant Professor of Dentistry, Department of Periodontics and Oral Medicine,
		School of Dentistry, University of Michigan
	2005 - 2010	Research Fellow, Oral and Pharyngeal Cancer, National Institute of Dental and
		Craniofacial Research, NIH
	2003 - 2005	Visiting Fellow, Oral and Pharyngeal Cancer Branch, National Institute of Dental
		and Craniofacial Research, NIH
	1999 - 2003	Instructor, Department of Oral Pathology, University of Sao Paulo

Summary of Evaluation:

Teaching: Professor Squarize provides a high volume of didactic teaching in the pre-doctoral dental and dental hygiene curriculums at the School of Dentistry. She is currently the course director on two courses providing a large number of lectures, as well as teaching in six additional courses. Her student evaluations are uniformly positive showing most all scores in the 4.0 - 5.0 range. Based on her early teaching evaluations (2012) with few scores ranging from 3.6 – 4.2 in course DENTHYG 393, which she directs, to more recent scores (2016) that range from 4.2 – 4.8, it is evident that Professor Squarize has boosted her teaching skills. Overall, student comments state that Professor Squarize is a fair teacher, provides great feedback to students' questions, is very knowledgeable, provides good examples for learning, and is organized and very approachable. Since being at the University of Michigan, Professor Squarize has served as a mentor or advisor to 10 pre-doctoral students, 15 graduate students, six postdoctoral trainees, and five visiting professors. She mentors students both at the University of Michigan and internationally. The outcome of her mentoring efforts is demonstrated by her students' accomplishments and awards, including the Excellency in Research Award at the XVIII Research Meeting, University of São Paulo in 2011, the Edward H. Hatton Travel Award in 2012, and the Hinman Symposium Award of Most Outstanding Presentation in Basic Science Research. Additionally, Professor Squarize plays a key role in an exchange program between the School of Dentistry and several schools in Brazil through the Global Oral Health Initiatives program at the School of Dentistry.

Professor Squarize has shown significant involvement in teaching at the School of Dentistry and in Brazil. It is clear that her teaching strategies aim to foster lifelong learning and critical thinking, and her delivery is well received by students and peers demonstrating not only the quantity, but also the quality of her teaching. This, along with her high level of mentoring activities highlights her leadership as an educator shaping the future leaders of dentistry.

<u>Research:</u> Professor Squarize's research focuses on the understanding of pathobiology of head and neck squamous cell carcinoma and the contribution of this knowledge to cancer therapy. Her work has led to a significant number of high quality publications and numerous presentations at scientific meetings. Since being in rank she has published 42 peer-reviewed scientific articles, being listed as first or senior author

on 11. Most of her publications are in high quality journals such as *PLoS One*, *Journal of Dental Research*, *Stem Cell Reports*, *Molecular and Cellular Biochemistry* and more. Her research is supported by an R01 grant from the National Institutes of Health, the prestigious Harold Amos Medical Faculty Development Award from the Robert Wood Johnson Foundation, and three institutional grants on which she is listed as the PI. She currently has two R01 submissions pending review. Her past record of funding is consistent showing three NIH grants, and two additional grants from university and foundation sources.

Professor Squarize has carved out a clear area of expertise for which she is recognized by her peers at the local, national and international levels. She has been able to receive NIH research support at a time that is very challenging for research funding. She has shown a unique capacity to obtain and sustain support from a variety of sources. Her trajectory indicates that she will be able to continue to successfully grow, support and expand her research program in future years.

Recent and Significant Publications:

- Almeida LO, Guimarães DM, Martins MD, Martins MAT, Warner KA, Nör JE, Castilho RM, Squarize CH. Unlocking the chromatin of adenoid cystic carcinomas using HDAC inhibitors sensitized cancer stem cells to cisplatin and induces tumor senescence. *Stem Cell Res.* 2017 Apr 8;21:94-105. PMID: 28426972.
- Matsumoto CS, Almeida LO, Guimarães DM, Martins MD, Papagerakis P, Papagerakis S, Leopoldino AM, Castilho RM, Squarize CH. PI3K-PTEN dysregulation leads to mTOR-driven upregulation of the core clock gene BMAL1 in normal and malignant epithelial cells. *Oncotarget*. 2016 Jun 7. PMID: 27285754.
- Wagner VP, Martins MD, Dillenburg CS, Meurer L, Castilho RM, Squarize CH. Histogenesis of keratoacanthoma: histochemical and immunohistochemical study. *Oral Surg Oral Med Oral Pathol Oral Radiol*. 2015 Mar;119(3):301-7 (Issue cover).
- Squarize CH, Castilho RM, Abrahao AC, Molinolo A, Lingen MW, Gutkin JS. PTEN Deficiency Contributes to the Development and Progression of Head and Neck Cancer. 2013 *Neoplasia* 15(5):461-71. (Issue cover).
- Squarize, CH, Castilho RM, Bugge TH, Gutkind JS. Accelerated Wound Healing by MTOR Activation in Genetically Defined Mouse Models. *PLoS One*, 5(5):e10643, 2010.

Service: Professor Squarize contributes significantly to service to support the School of Dentistry's mission. Since being in rank, she has served on several department committees and numerous school committees and programs. She specifically enjoys serving on the School of Dentistry's admissions committee and she supports the internationally trained dentist program, as well as the Global Oral Health Initiative at the school. Her work in the Global Oral Health Initiative program is dedicated to fostering collaborations and student exchanges between the University of Michigan School of Dentistry and dental schools in Brazil. As well, she is involved in service at the national and international levels, as a master thesis committee member for students from two universities in Brazil, session chair at the 2016 American Academy of Dental Research/Canadian Academy of Dental Research Annual Meeting and Exhibition, a member of the American Association of Dental Research Nominating Committee, and as a manuscript reviewer for nineteen journals. Her recognition as an expert reviewer is an additional indicator of her reputation of being a rising and promising clinician scientist.

External Reviewers:

Reviewer A: "My overall impression of Dr. Squarize is of a successful and respected clinical researcher that has established an international reputation in the field of oral cancer research. She possesses sound scientific background and critical thinking."

Reviewer B: "Her teaching extends beyond the walls of the classroom. Her students went on to becoming Dental Doctors and some followed into the completion of their master's, PhD and postdocs and even into faculty positions. ... Her reputation goes beyond the dental field publishing in Cell Stem Cell, Cancer Research, neoplasia, Oncotarget, Medicine, and other important scientific journals."

Reviewer C: "Dr. Squarize is a critical resource for the University of Michigan and serves as a role model for the dental, dental hygiene students, and residents at the University of Michigan. My assessment is that she has ably fulfilled and even surpassed the milestones to be promoted."

Reviewer D: "Her list of mentees and the awards they have received under her guidance is impressive. In addition, the range of didactic and clinical disciplines she has instructed in supports her broad knowledge base. Perhaps most important in considering Dr. Squarize's teaching accomplishments is her personal portfolio statement in which she describes her well thought out, and contemporary teaching philosophy and approach."

Reviewer E: "While I do not know her personally, she has always struck me as a person of the highest degree of integrity and honesty and is clearly respected by her peers. Overall, she represents an excellent combination of someone who excels at basic science/translational research and education."

Reviewer F: "Dr. Squarize has made significant strides forward in her academic and professional career, especially after joining the University of Michigan as a tenure-track assistant professor. Importantly, Dr. Squarize has demonstrated a robust commitment to teaching, research and scholarship."

Summary of Recommendation:

Professor Squarize is a valuable faculty member to the department, school and university. She has demonstrated outstanding scholarship activities and excellence in teaching. Her dedication and commitment to her students in the classroom, clinic and laboratory are of the highest caliber. She leads by example and has a unique ability to tap into each student's learning style developing lifelong learners. She is a respected clinical researcher who has established an international reputation in her field. Her service engagement is broad and impactful. It is with the support of the Executive Committee, that I recommend Cristiane H. Squarize for promotion to associate professor of dentistry, with tenure, School of Dentistry.

Laurie K. McCauley

Dean, School of Dentistry