PROMOTION RECOMMENDATION The University of Michigan School of Dentistry

Rogerio Castilho, assistant professor of dentistry, School of Dentistry, is recommended for promotion to associate professor of dentistry, with tenure, School of Dentistry.

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PhD	2003	Oral Pathology, University of Sao Paulo, Sao Paulo, Brazil
MSc	2000	Oral Pathology, University of Sao Paulo, Sao Paulo, Brazil
DDS	1995	Pontifical Catholic University of Campinas, Campinas, Brazil

Professional Record:

2010 - Present	Assistant Professor of Dentistry, Department of Periodontics and Oral
	Medicine, School of Dentistry, University of Michigan
2007 - 2010	Research Fellow, Oral and Pharyngeal Cancer, National Institutes of Dental
	and Craniofacial Research, NIH
1999 - 2003	Instructor-Surgical and Experimental Pathology, Department of Oral
	Pathology, University of Sao Paulo

Summary of Evaluation:

<u>Teaching:</u> Professor Castilho provides a significant amount of didactic and preclinical teaching in the school and university. He is a highly engaged teacher and mentor. While in rank he has directed or co-directed several didactic courses at the predoctoral and graduate levels. Currently, he is a director or co-director of four courses and is a major contributor to the pre-doctoral curriculum. Professor Castilho has an acute awareness of the importance of integrating research into the curriculum in order to provide students with the most in depth knowledge of the biology of diseases and the latest treatment options. In his lectures, he disseminates the concept of continuous learning by introducing cutting-edge discoveries to stimulate curiosity and increase student engagement. Professor Castilho's student and peer teaching evaluations are uniformly excellent.

Professor Castilho has an established track record as a mentor for pre-doctoral and post-graduate dental students. While in rank, he has served as the academic advisor of four dental students and as a research mentor to another five dental students. He has directed or co-directed 10 MS and PhD student theses and has mentored six post-doctoral fellows at both the University of Michigan and at two international institutions. His success as a mentor is reflected in the number of research awards his students have received including the Hinman Student Research Symposium, "Most Outstanding Presentation in Basic Science Research," First Prize award at the 2015 University of Michigan, School of Dentistry Research Day, the Edward H. Hatton award at the International Association of Dental Research, Brazilian Division, and numerous others. Professor Castilho's contributions to teaching and mentoring are of the highest caliber. He engages students at all levels with compassion to enrich each student's learning experience with teaching strategies that boost critical thinking and fosters their ability to be lifelong learners.

Research: Professor Castilho has developed a productive research program focused in epithelial biology and the molecular mechanisms that control homeostasis and cancer behavior. He is dedicated to maintaining productivity of his laboratory while delivering new findings in tumor and epithelial biology. His research collaborations span research fields and geography, as demonstrated by this work with experts at the University of Michigan, his continued work with his previous mentor, Silvio Gutkind at the National Institutes of Health, NIDCR, and his continued research and co-publications with many international scientists. Since in rank, Professor Castilho has 40 peer reviewed published which he is first or senior author on 17. Currently he is listed as the PI one major NIH grant and has two institutional grants supporting his research. He has three additional grants pending; two of these are R01 submissions at the National Institutes of Health. He has had a distinguished career in Oral Pathology and has made seminal contributions to his field. He is recognized globally as an expert in cancer stem cells in head and neck cancer. He has been invited to present his work 37 times at national and international meetings and symposiums. He recently was awarded (2017) the HM Goldman first prize for basic research in periodontal medicine from the Societa Italiana de Parodontologia e Implantologia.

Professor Castilho is a gifted and productive researcher who has made multiple fundamental contributions to his field as demonstrated by his impressive publication record and his reputation in the field of head and neck cancer research.

Recent and Significant Publications:

- Wagner VP, Martins MD, Guimarães DM, Vasconcelos AC, Maurer L, Vargas PA, Fonseca FP, Squarize CH, Castilho RM. Reducted Chromatin acetylation of malignant salivary gland tumors correlates with enhanced proliferation. *J Oral Pathol Med*. 2017 Feb 4. Doi: 10.1111/job.12557.
- Wagner VP, Martins MA, Martins MD, Warner KA, Webber LP, Squarize CH, Nör JE, Castilho RM. Overcoming adaptive resistance in mucoepidermoid carcinoma through inhibition of the IKK-β/IKBa/NFKB axis. *Oncotarget*. 2016 Nov 8;7(45):73032-73044.
- Guimarães DM, Almeida LO, Martins MD, Warner, KA, Vargas PA, Nunes FD, Squarize CH, Nör JE, and Castilho RM. Sensitizing mucoepidermoid carcinomas to chemotherapy by targeted disruption of cancer stem cells. *Oncotarget*. 2016 Jul 5:7(27):42447-42460.
- Martins MD, Jiao Y, Larsson L, Ameida LO, Garaicoa-Pazmino C, Le JM, Squarize CH, Inohara N. Giannobile WV, Castilho RM. Epigenetic Modifications of Histones in Periodontal Disease, *J Dent Res.* 2016 Feb;95(2):215-22.
- Giudice FS, Pinto DS Jr, Nör JE, Squarize CH, Castilho RM. Inhibition of histone deacetylase impacts cancer stem cells and induces epithelial-mesenchyme transition of head and neck cancer. *PLoS One*. 2013;8(3):e58672. Epub 2013 Mar 20.

Service: Professor Castilho has shown a clear commitment to the mission of the school, university and to the profession. At the school level, he is a member of the Bylaws Committee, the Global Initiatives Committee, Victors for Faculty Development Program, and the Multicultural Affairs Committee. He was a member of the search committee (2014) for the program director for Diversity and Inclusion (previously known as Multicultural Affairs), at the School of Dentistry. At the department level, Professor Castilho has served on two internal department promotion review committees, was a member of the organizing committee for the

Donald Kerr Symposium, and a member of a master dissertation committee. At the university level he is a member of the Secretary of the University Advisory Committee (SAC). Additionally, Professor Castilho has served as an editorial board member of two journals and is an ad hoc reviewer for numerous other journals, and he has served as a member of four PhD thesis committees for oral pathology students at two universities in Brazil.

Professor Castilho demonstrates a commitment to the School of Dentistry's mission by participating in a wide variety of service activities at all levels. He is a model citizen of the school and university and has been particularly active in service related to recruitment of minorities as a member of the Multicultural Affairs Committee.

External Reviewers:

Reviewer A: "His perspective and approach as an educator is undoubtedly enhanced by the novel science originating from his research laboratory. ... Dr. Castilho is an oral pathologist, and educator, a mentor, a committed academician and scientist, and he clearly has a strong and continuous record of scholarly activity."

Reviewer B: "As an impartial reviewer, I am confident that Dr. Castilho would be promoted to the position of Associate Professor with Tenure in many US dental schools. This is based on the quality and number of his publications as well as his contributions to the teaching mission of the school and his strong record of service."

Reviewer C: "Dr. Castilho appears to be very accomplished as a candidate for associate professor with tenure. The depth and breadth of his body of work is exceptional. In brief, Dr. Castilho enjoys a robust portfolio of research accomplishments in an exciting and competitive field. ... I would consider Dr. Castilho to be one of the strongest candidates for promotion to associate professor with tenure who I have reviewed during the past 30 years."

Reviewer D: "He demonstrates enthusiasm, exemplary work ethic, and an extraordinary talent for research and teaching; therefore, it is with no hesitation that I rate him among the best teachers and scientists that I have evaluated. ... Dr. Castilho's expertise and accomplishments reflect a continuing trajectory of increased quality and quantity of original work and peer recognition both as a scholar, educator, and in leadership roles at the national and international scientific levels."

Reviewer E: "Since joining the faculty at the University of Michigan School of Dentistry in 2010, Dr. Castilho has continued to make outstanding contributions by reporting as first or senior author the findings of his research group in a variety of prestigious general biomedical as well as specialty journals... He has also demonstrated a strong collaborative outlook by actively participating in local, national and international scientific team efforts as evidenced by his coauthorship in a number of original research manuscripts as well as reviews."

Reviewer F: "Among the many examples of his service to the academic community listed in his statement of service is his dedication to the establishment of a multicultural and diverse working environment.... Dr. Castilho helps to achieve this goal of a diverse workforce not only by his involvement in the Multicultural Affairs Committee, but also through the Global Initiatives at the

University of Michigan, which fosters student exchange with other universities around the world."

Reviewer G: "I view Rogerio as one of the most motivated and talented young researchers I have worked with. He brings a unique combination of knowledge, ability, and skills into studies of oral epithelial cell function."

Summary of Recommendation:

Professor Castilho is a conscientious, dedicated teacher, brilliant scientist and well-rounded service member at the school, university, national and international levels. He has gained distinction as an oral pathologist and has made pivotal contributions to the understanding of how molecular networks get dysregulated in head and neck cancers. Since being in rank, his scholarship efforts have been exceptionally productive showing 40 peer review publications and numerous invited presentations around the globe. His research has been prolific and impactful. Equally, his commitment to teaching and service parallels his research work as being exemplary. It is with the support of the Executive Committee, that I recommend Rogerio Castilho for promotion to associate professor of dentistry, with tenure, School of Dentistry.

Laurie K. McCauley

Dean, School of Dentistry

May 2018