

PROMOTION RECOMMENDATION
The University of Michigan
School of Dentistry

Hajime Sasaki, associate professor of dentistry, without tenure, School of Dentistry, is recommended for the granting of tenure to be held with his title of associate professor of dentistry, School of Dentistry.

Academic Degrees:

Ph.D.	1998	Iwate Medical University Graduate School, Morioka, Japan
M.S.	1989	Iwate Medical University School of Dentistry, Morioka, Japan

Professional Record:

2018-present	Adjunct Professor, Dental Education, Iwate Medical University School of Dentistry
2017-present	Associate Professor, without tenure, Department of Cariology, Restorative Sciences, and Endodontics, University of Michigan School of Dentistry
2015-2017	Associate Member of the Staff, Department of Immunology & Infectious Diseases, Forsyth Institute
2013-present	Adjunct Lecturer, Department of Oral Biochemistry, Iwate Medical University
2006-2015	Assistant Member of the Staff, Department of Cytokine Biology/Immunology & Infectious Diseases, Forsyth Institute
2004-2006	Staff Scientist, Department of Cytokine Biology, Forsyth Institute
2002-2004	Staff Associate, Department of Cytokine Biology, Forsyth Institute
1999-2002	Post-doctoral Fellow, Cytokine Biology, Forsyth Institute
1998-1999	Visiting Scholar, Department of Cytokine Biology, Forsyth Dental Center
1992-1999	Assistant Professor, Department of Endodontics & Operative Dentistry, Iwate Medical University School of Dentistry

Summary of Evaluation:

Teaching: Professor Sasaki actively engages in teaching responsibilities in the pre-doctoral and graduate curriculums at the School of Dentistry. In the pre-doctoral curriculum he is a co-director of DENT533 Infection and Immunity and an instructor in DENT737 Preclinical Endodontics Laboratory. At the graduate level, he instructs in the graduate endodontics clinic and the case presentation course. He lectures in the biology of the dental pulp course. His dedication to teaching is evident through his commitment to improving his courses and interactions with students. Professor Sasaki's evolution from a research-focused role at Forsyth Institute to his current teaching and research focus at the University of Michigan showcases his dedication that has yielded remarkable success, making him a sought-after instructor in the graduate endodontics clinic as a co-director of a significant course in the DSS curriculum. His commitment to the school's teaching mission is commendable. His outstanding teaching quality is evident through positive feedback from students and peers. His comprehensive contributions to clinical and didactic teaching stand out in both quantity and quality. Professor Sasaki's mentors students at the pre-doctoral, graduate and Ph.D. levels.

Research: Professor Sasaki's research is centered on integrated dental inflammoly. His research on dental inflammation focuses on innate immunity, hypoxia, functional cytokine networks, host-bacterial interactions, and bone biology with strong clinical translation. He has secured 27 research grants throughout his career. He currently is the principal investigator on one major National Institutes for Health (NIH) RO1 grant studying serum amyloid's role in periapical infections. He is a co-principal investigator on an NIH R21 grant studying the structure and function of dental lymphatics. His publication record includes 46 peer-reviewed papers, and one book chapter. In rank, he has 15 peer-reviewed papers, and he is first or senior author on seven of those. In recognition of his noteworthy scholarship, he received the *Journal of Endodontics* Best Article of the Year Award in the Basic Research Biology category for two consecutive years. Professor Sasaki has presented his work nationally and internationally and is recognized for his contributions to clinically impactful areas of tooth pain and infection management in dentistry.

Recent and Significant Publications:

Tazawa K, Jadhav R, Fenno JC, McDonald NJ, Sasaki H. Hypochlorous Acid Inactivates Oral Pathogens And A SARS-CoV-2-surrogate. *BioMed Central Oral Health, BMC Oral Health*, 2023(1).

Tazawa, K, Sasaki H. Three-dimensional cellular visualization in mouse apical periodontitis using combined whole-mount staining and optical tissue clearing. *Journal of Oral Biosciences, J. Oral Bioscil*, 2023;65(1):132-135.

Dal-Fabbro R, Swanson wB, Capalbo LC, Sasaki H, Bottino MC. Next-generation biomaterials for dental pulp tissue immunomodulation. *Dental Materials, Dent Mater*, 2023;39(4);133-349.

Tazawa K, Azuma Presse MM, Furusho H, Stashenko P, Sasaki H. Revisiting the role of IL-1 signaling in the development of apical periodontitis. *Frontiers in Dental Medicine, Front. Dent. Med.*, doi 10.3389, 2022;(3).

Hirai K, Furusho H, Kawashima N, Xu S, de Beer MC, Battaglino R, Van Dyke T, Stashenko P, Sasaki H. Serum Amyloid A Contributes to Chronic Apical Periodontitis via TLR2 and tLR4. *Journal Dental Research*, 98(1), 117-125.

Service: Professor Sasaki activity engages in service at various levels. At the School of Dentistry, he is a member of the research committee and the graduate endodontics admission committee. He participates in thesis committees, faculty search committees, and serves as a manuscript reviewer for reputable journals like *Frontiers in Microbiology* and the *Journal of Bone and Mineral Research Plus*. His involvement extends to judging the school's annual Research Day poster competition. Internationally, he has contributed to the editorial board of the *Journal of Dental Research* and *Frontiers in Dental Medicine*. Professor Sasaki's global service commitment is highlighted by his involvement in multiple NIH study sections, indicating widespread recognition of his expertise and his dedication to the profession through grant application reviews. Professor Sasaki's service contributions are substantial.

External Reviewers:

Reviewer A: "Upon the analysis of Dr. Sasaki's CV and the guidelines describing the considerations for promotion and tenure, it becomes evident that he fulfills the listed criteria. Dr. Sasaki is actively involved in teaching activities at the University of Michigan, ranging from

didactic to pre-clinical/clinical courses; presents a record of independent scholarly contributions in a field, comprising a history of funded grants and derived publications, and an overall description of his contributions in academic, professional and University service.”

Reviewer B: “Dr. Sasaki is a successful researcher with a consistent track record of extramural funding. He has received \$4,237,725 in grant funding in the past 5 years and has been consistently funded through the National Institutes of Health (NIH) since 2013.”

Reviewer C: “Some investigators in this field have tried to broaden the impact of using the periapical model systems as a means to understand innate signaling in the context of osteoimmunology. He lists a few patents pending since his appointment at the University of Michigan, which demonstrates that he may have found a way to broaden the impact of his scientific investigations. In addition, he has been selected twice for the best papers of the *Journal of Endodontics*, which is his clinical disciplines flagship journal. Thus, he is undoubtedly a national leader in his field with a distinguished record of significant scholarly contributions in endodontics.”

Reviewer D: “Impressively, Dr. Sasaki has made the move from the research lab to a position that puts emphasis on high-quality student education at the University of Michigan. There is no doubt that his contributions to endodontic biology is very relevant; has continued to impact and productivity since 2017 when he arrived at Michigan.”

Reviewer E: “Dr. Sasaki’s strengths reside in being a qualified educator, and well known in the specialty of Endodontics. It appears that he has integrated himself extremely well in the culture of academic dentistry and will continue as an active and productive member of his school faculty team.”

Summary of Recommendation:

Professor Sasaki is a valuable dentist scientist who brings knowledge and expertise to the classroom and endodontic clinic. He has taken advantage of the elite scholarly environment that the University of Michigan has to offer, enhancing national and international visibility to our school in the field of endodontics. It is with the support of the Executive Committee that I recommend Hajime Sasaki for the granting of tenure to be held with his title of associate professor of dentistry, School of Dentistry.



Vesa Kaartinen,
Professor and Associate Dean for Research
School of Dentistry

May 2024