

PROMOTION RECOMMENDATION
THE UNIVERSITY OF MICHIGAN
MEDICAL SCHOOL
DEPARTMENT OF INTERNAL MEDICINE
DEPARTMENT OF PATHOLOGY

Nobuhiko Kamada, Ph.D., associate professor of internal medicine, with tenure, Department of Internal Medicine, and associate professor of pathology, without tenure, Department of Pathology, Medical School, is recommended for promotion to professor of internal medicine, with tenure, Department of Internal Medicine, and professor of pathology, without tenure, Department of Pathology, Medical School.

Academic Degrees

Ph.D.	2007	Keio University School of Medicine, Tokyo, Japan
M.S.	2000	The University of Tokushima, Tokushima, Japan
B.S.	1998	Kobe-gakuin University, Hyogo, Japan

Professional Record

2023 - present	Associate Professor (without tenure), Department of Pathology, University of Michigan
2021 - present	Specially Appointed Professor, Immunology Frontier Research Center, Osaka University, Japan
2020 - present	Associate Professor (with tenure), Department of Internal Medicine, Division of Gastroenterology and Hepatology, University of Michigan
2013 – 2020	Assistant Professor, Department of Internal Medicine, Division of Gastroenterology and Hepatology, University of Michigan
2007 - 2009	Instructor, Department of Gastroenterology and Hepatology, Keio University, Tokyo, Japan
2004 - 2007	Research Associate, Department of Internal Medicine, Keio University, Tokyo, Japan

Summary of Evaluation

Teaching: Dr. Kamada has an excellent teaching record. He instructs learners through both research mentorship and didactic teaching. Learners include faculty members, clinical fellows, post-doctoral fellows, graduate students, and undergraduate students, as well as hosting visiting scholars. His mentorship work with these trainees has led to several published research papers in medical science journals, presenting their findings at institutional, national, and international conferences and successfully competing for post-doctoral and career development awards. He is the co-organizer of the institution's T32 Basic and Translational Gastrointestinal Research Seminar Series and co-director of the T32 Training in Basic and Translational Digestive Sciences postdoctoral training seminars. He is an instructor for the Research in Global Research (PIBS 503) course, a faculty reviewer for Immunology 815, and has been a guest lecturer in several different courses for the University.

Research: Dr. Kamada's research is focused on how the gut microbiota interacts with host immunity in the context of gastrointestinal health and disease. He has a robust track record of funding from the National Institutes of Health (NIH), the American College of Gastroenterology, and the Crohn's and Colitis Foundation. He is currently supported as a multi-principal investigator or principal investigator by three NIH R01s and serves as a co-investigator on an additional four NIH R01s. He is a mentor on an NIH K08 grant and one foundation grant, and consultant on several additional grants. He has been awarded one patent. He has authored 85 peer-reviewed scientific articles and 22 reviews, in high-impact journals such as *Nature Microbiology*, *Nature Medicine*, *Cell*, *Journal of Immunology*, *JCI*, and *Cell*

Reports. He has been invited on 21 occasions as an invited speaker, with an additional seven as a moderator and 14 seminars, both nationally and internationally including in Japan, Korea, Greece, and Taiwan. In 2022, Dr. Kamada was recognized as a Clarivate Highly Cited Researcher and was honored with the Young Investigator Award in Basic Science from the American Gastroenterological Association in 2020.

Recent and Significant Publications:

- Sugihara K, Kitamoto S, Saraithong P, Nagao-Kitamoto H, Hppstal M, McCarthy C, Rosevelt A, Muraleedharan CK, Gilliland III MG, Imai J, Omi M, Bishu S, Kao JY, Alteri CJ, Barnich N, Schmidt TM, Nusrat A, Inohara N, Golob JL, Kamada N, “Mucolytic bacteria license pathobionts to acquire host-derived nutrients during dietary nutrient restriction,” *Cell Reports*. 2022. 40(3):111093.
- Imai J, Ichikawa H, Kitamoto S, Golob JL, Kaneko M, Nagata J, Takahashi M, Gilliland MG, Tanaka R, Nagao-Kitamoto H, Hayashi A, Sugihara K, Bishu S, Tsuda S, Ito H, Kojima S, Karakida K, Matsushima M, Suzuki T, Hozumi K, Watanabe N, Giannobile WV, Shirai T, Suzuki H, Kamada N, “A potential pathogenic association between periodontal disease and Crohn's disease,” *JCI Insight*. 2021 Oct 28;e148543.
- Hayashi A, Nagao-Kitamoto H, Kitamoto S, Kim CH, Kamada N, “The butyrate-producing bacterium *Clostridium butyricum* suppresses *Clostridioides difficile* infection via neutrophil- and antimicrobial cytokine-dependent but GPR43/109a-independent mechanisms,” *J Immunol*. 2021; 206(7):1576-1585.
- Kitamoto S, Nagao-Kitamoto H, Jiao Y, Gilliland III MG, Hayashi A, Imai J, Sugihara K, Miyoshi M, Brazil JC, Kuffa P, Hill BD, Rizvi SM, Wen F, Bishu S, Inohara N, Eaton KA, Nusrat A, Lei YL, Giannobile WV, and Kamada N, “The intermucosal connection between the mouth and gut in commensal pathobiont-driven colitis,” *Cell*. 2020;182(2):447-462.
- Nagao-Kitamoto H, Leslie JL, Kitamoto S, Jin C, Thomsson KA, Gilliland MG 3rd, Kuffa P, Goto Y, Jenq RR, Ishii C, Hirayama A, Seekatz AM, Martens EC, Eaton KA, Kao JY, Fukuda S, Higgins PDR, Karlsson NG, Young VB, Kamada N, “Interleukin-22-mediated host glycosylation prevents *Clostridioides difficile* infection by modulating the metabolic activity of the gut microbiota,” *Nat Med*. 2020;26(4):608-617.

Service: Dr. Kamada has an outstanding service record both nationally and internationally. Internationally, he is an active member of the Extramural Programs Committee for the Society for Mucosal Immunology. He is a grant reviewer for four international study sections including The Netherlands Organization for Scientific Research and The French National Research Agency. Nationally, he has served on several study sections including those with the NIH and the Department of Defense. Dr. Kamada is the Section Councilor for the American Gastroenterological Association Institute Council and a member of the National Scientific Advisory Committee for the Crohn's and Colitis Foundation. He is currently a member of four journal editorial boards, including as the associate editor on the International Advisory Board for *Immunology Medicine*, *JCI Insight*, *Frontiers in Medicine-Gastroenterology*, and *Infection and Immunity*. Institutionally, he serves as several committees as a member including the Immunology Preliminary Examination Committee and on the advisory board of the Immune Monitoring Shared Resource, University of Michigan Rogel Cancer Center, and has served on several dissertation committees as a committee member.

External Reviewers

Reviewer A: “Dr. Kamada has demonstrated an ongoing commitment to the mission and citizenship of the University of Michigan through his service on various committees and advisory boards, co-organizer for conferences and working groups, and active involvement as an interviewer, grant reviewer, and participant in internal retreats. He has further provided his services as an instructor in institutional courses and as a mentor to trainees in his laboratory and in other laboratories.”

Reviewer B: “Throughout his career, Nobu has made groundbreaking discoveries, including seminal observations regarding the role of intestinal antigen presenting cells and lymphocytes in IBD pathogenesis. I have cited many of his papers in my publications and lectures and could talk at length on any number of them.”

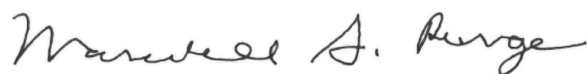
Reviewer C: “A hallmark of Nobu’s success is his steady and impressive publication record with 86 peer reviewed papers and an additional 25 invited topical reviews and commentaries, many in high impact journals. While Nobu is the primary driver on a number of these significant publications as a first or senior author, it is noteworthy that a significant part of his work stems from strong and lasting team science, an approach that I strongly embrace because advances in science today require a multi-disciplinary approach.”

Reviewer D: “For his work, he has been awarded multiple grants from the NIH (currently 3 R01’s and other collaborative NIH grants) as well as topic-specific foundation monies (e.g. Crohn’s and Colitis Foundation). These findings have had lasting implications [for] the field of GI disease and form the basis of a body of research that identifies novel molecular mechanisms of mucosal immunity mediated by the microbiota and their crosstalk within the mucosa. Dr. Kamada has published these original findings in some of the field’s best journals, including Cell, Nature Medicine, Cell Reports, and JCI Insight to name a few.”

Reviewer E: “...Dr. Kamada acts as [a] manuscript reviewer for many high-profile journals and is a member of the editorial boards of Infection and Immunity and the international advisory board for Immunologic Medicine and JCI Insight. He has served as ad hoc reviewer on seven national (NIH) and one international grant review panels. He is a long-term standing member of the Crohn’s and Colitis Foundation (CCF) Research Training Award committee and National Scientific Advisory committee. He is a member of the AGA and serves on the Extramural Program Committee for the Society for Mucosal immunology. Dr. Kamada has served on several institutional administrative and educational committees, including the Immunology Preliminary Examination committee and the Immune Monitoring Shared resource at Michigan. Overall, this is a strong level [of] service activity.”

Summary of Recommendation:

Dr. Kamada is a nationally and internationally recognized expert in the field of gut microbiota and the role it plays with host immunity in the context of gastrointestinal health and disease. He has made significant contributions in his scholarly productivity, educational contributions, and professional service. I am pleased to recommend Nobuhiko Kamada, Ph.D. for promotion to professor of internal medicine, with tenure, Department of Internal Medicine, and professor of pathology, without tenure, Department of Pathology, Medical School.



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

May 2024