PROMOTION RECOMMENDATION UNIVERSITY OF MICHIGAN MEDICAL SCHOOL DEPARTMENT OF PATHOLOGY

Megan S-Y Lim, M.D., Ph.D., associate professor of pathology, without tenure, Department of Pathology, Medical School, is recommended for promotion to professor of pathology, with tenure, Department of Pathology, Medical School.

Academic Degrees:

Ph.D.	1999	University of Calgary, Canada and National Cancer
		Institute, Washington DC
M.D.	1988	University of Calgary, Canada
M.S.	1985	University of Calgary, Canada
B.S.	1983	University of Calgary, Canada

Professional Record:

2006-present	Associate Professor of Pathology, University of Michigan
2004-2006	Associate Professor of Pathology, University of Utah
2000-2004	Assistant Professor of Pathology, University of Utah
1998-2000	Assistant Professor of Laboratory Medicine and Pathobiology,
	University of Toronto, Canada

Summary of Evaluation:

Teaching: Dr. Lim's primary educational efforts over the past four years have been in hematopathology. She serves as the director of the Hematopathology Fellowship Program, which currently includes three fellows, two of whom are currently assigned to the clinical service and one to the research laboratories. She has designed the curriculum for the fellowship which is rated among the best in country. She also teaches house officers rotating through the hematopathology service. Her formal evaluations from the fellows and house officers are high, 4.83 and 4.62 out of five. She also has mentored doctoral and postdoctoral students, and currently supervises and mentors four postdoctoral fellows in her research laboratory. At the national level, she has taught a course on the World Health Organization classification of hematopoietic neoplasms for the American Society for Clinical Pathology. Currently, she coteaches a highly successful course on Proteomics for Pathologists at the annual meeting of the United States and Canadian Academy of Pathology. Being chosen to present such a course at this meeting is a highly competitive undertaking with less than 20% of the submitted course proposals being accepted.

<u>Research</u>: Dr. Lim is a molecular hematopathologist whose research focuses on elucidation of the biologic events in the pathogenesis of anaplastic large cell lymphomas, particularly the chromosomal translocations characteristic of this neoplasm. She has expertise in tandem mass

spectrometry based proteomics, and recently her work has centered on finding the proteomic signatures of malignant lymphomas using this technology. She is currently the recipient of an R01 from the NIH for study of proteomic biomarkers in ALK-positive lymphoma and she is also the principal investigator on another award for the study of similar changes in neuroblastoma. Her work has been consistently published in high quality peer-reviewed journals. Since 2006, she has had 21 manuscripts accepted in such journals as the *Journal of Hematopathology, Blood, Modern Pathology, Nature Biotechnology, Cancer Cell,* and *Laboratory Investigation*. Since 2006, she has also authored or co-authored 13 book chapters. She has been invited to present her work at a lymphoma symposium in France and symposia for the Children's Oncology Group, and she was an invited speaker for the Lymphoma Forum of Excellence in Toronto. She has been a visiting professor at the University of Calgary in Canada, St. Louis University and the University of Nebraska.

Recent and Significant Publications:

Lim MS, Carlson ML, Crockett DK, Fillmore GC, Abbott DR, Elenitoba-Johnson OF, Tripp SR, Rassidakis GZ, Medeiros LJ, Szankasi P and Elenitoba-Johnson KS: The proteomic signature of NPM/ALK reveals deregulation of multiple cellular pathways. *Blood* 114:1585-1595, 2009.

Miles RR, Mankey CC, Seiler CE 3rd, Smith LB, Teruya-Feldstein J, Shi ED, Elenitoba-Johnson KS and Lim MS: Expression of Grb2 distinguishes classical Hodgkin lymphomas from primary mediastinal B-cell lymphomas. *Hum Pathol* 40:1731-1737, 2009.

Mathivanan S, Ahmed M, Ahn NG...Lim MS... and Pandey A: Human Proteinpedia enables sharing of human protein data. *Nat Biotechnol* 26:164-167, 2008.

Schumacher JA, Crockett DK, Elenitoba-Johnson KS and Lim MS: Evaluation of enrichment techniques for mass spectrometry: identification of tyrosine phosphoproteins in cancer cells. *J Mol Diagn* 9:169-177, 2007.

Sjostrom C, Seiler C, Crockett DK, Tripp SR, Elenitoba-Johnson KS and Lim MS: Global proteome profiling of NPM/ALK-positive anaplastic large cell lymphoma. *Exp Hematol* 35:1240-1248, 2007.

Service: Dr. Lim has made significant contributions to her institution and to her profession. At the University of Michigan, she has been a member of the Division of Clinical Pathology Peer Review Committee, a member of the Organizing Committee of the CCMB Seminar Series, and a member of the Search Committee for the director of surgical pathology. At the national level, she is the vice-chair of the Young Investigator Committee of the Children's Oncology Group and co-chair of the NHL Biology Working Group of the same organization. She is a member of the Commission on Publication for the American Society for Clinical Pathology, a member of the Teaching and Education Committees of the Association for Molecular Pathology and the Society for Hematopathology, a vice-chair of the Non-Hodgkin's Lymphoma Disease Committee of the Children's Oncology group and a co-chair for Minisymposia of the American Society for Investigative Pathology. Internationally, she has been on organizing committees for international symposia on non-Hodgkin's lymphoma and Hodgkin's lymphoma of childhood and young adolescence. She is also a member of the editorial boards of four journals, including Laboratory Investigation and the Journal of Hematopathology and she is the editor of the Case of the Quarter

for the Society of Hematopathology. She is a referee for multiple other journals. She has been an ad hoc member of multiple study sections from the NIH, the Multiple Myeloma Research Foundation, the Canadian Cancer Society, the Veteran's Administration, and Cancer Research of the United Kingdom. Dr. Lim serves as the director of the Hematopathology Division of her department. She also shares diagnostic responsibilities on the hematopathology service, operating on that service for approximately 20% of her time. Her responsibilities include routine diagnostic work from the University Hospital and its clinics including lymph nodes, bone marrows and peripheral blood, and she is responsible for handling numerous consults sent to the hematopathology service from pathologists from other institutions. She is regarded as a superb diagnostician.

External Review:

Reviewer A: "Dr. Lim's research is in the forefront...Particularly exciting have been her contributions to the field of proteomics. Dr. Lim has been instrumental in developing and refining new proteomic techniques that enable investigators to analyze tyrosine phosphoproteins that play critical roles in cell signaling, but are present in low abundance. She has applied these and other techniques to investigate the consequences of deregulated tyrosine phosphorylation in anaplastic large cell lymphoma and other lymphomas and to dissect the molecular pathways that contribute to their pathogenesis."

<u>Reviewer B</u>: "...her work is well recognized as evidenced by her appointment in multiple NIH study sections, her invitation to speak at national and international meetings, as editorial member in several journals including the major journal in pathology, Lab Investigation."

<u>Reviewer C</u>: "...Megan is one of the world's experts in proteomics in pathology. Towards that end, I asked her to write a review article on Proteomics for *Laboratory Investigation* during my editorship...Her published critical review quickly became a 'top ten' cited article for a number of years to follow."

<u>Reviewer D</u>: "...Dr. Lim performs at the highest possible level...She is truly superb. In my opinion, she is in the top 1-2% of hematopathologists in the United States."

Reviewer E: "Dr. Lim is recognized as a national/international authority in hematopathology, especially the study of the molecular pathogenesis of anaplastic large cell lymphoma and biomarkers of other lymphomas...Dr. Lim is one of only a few hematopathologists active in diagnostic hematopathology and who, also, has a productive research program with successful grant funding."

Summary of Recommendation:

Dr. Megan Lim is an established scientist who has done pioneering work in proteomics in hematopathology, and in analyses of anaplastic large cell lymphoma. Her work is well funded. In addition, she handles a heavy service load in diagnostic hematopathology and the director of the hematopathology service and of its fellowship program. She is a superb educator in

hematopathology who is widely praised for her teaching activities and efforts. I am pleased to recommend Megan S-Y Lim, M.D., Ph.D., for promotion to professor of pathology, with tenure, Department of Pathology, Medical School.

James O. Woolliscroft, M.D.

Dean

Lyle C. Roll Professor of Medicine

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