

PROMOTION RECOMMENDATION
THE UNIVERSITY OF MICHIGAN
MEDICAL SCHOOL
DEPARTMENT OF INTERNAL MEDICINE
DEPARTMENT OF CELL AND DEVELOPMENTAL BIOLOGY

Qing Li, M.D., Ph.D., assistant professor of internal medicine, Department of Internal Medicine, and assistant professor of cell and developmental biology, Department of Cell and Developmental Biology, is recommended for promotion to associate professor of internal medicine, with tenure, Department of Internal Medicine, and associate professor of cell and developmental biology, without tenure, Department of Cell and Developmental Biology, Medical School.

Academic Degrees:

Ph.D.	2001	Johns Hopkins University
M.D.	1993	Beijing Medical University

Professional Record:

2014 – Present	Assistant Professor of Cell and Developmental Biology, University of Michigan
2010 – Present	Assistant Professor of Internal Medicine, University of Michigan
2009 – 2010	Clinical Lecturer of Internal Medicine, University of Michigan,
2008 – 2009	Assistant Adjunct Professor, University of California

Summary of Evaluation:

Teaching: Dr. Li's teaching activities span the entire spectrum at the Medical School however she spends the majority of her time instructing trainees in her laboratory and also serving as the associate director of the Hematology/Oncology Fellowship Program. She participates in graduate student dissertation committee meetings, graduate student seminars, and recruitment as well as clinical teaching of fellows, residents, interns and medical students in various conferences and during her inpatient rotations. During her time at the University of Michigan, Dr. Li has mentored over 20 trainees at all different stages in their careers. Her overarching goal is for her students to gain knowledge, learn techniques and skills, and develop the critical scientific thinking and habits necessary for a career in research. She also ensures her trainees receive training on the responsible conduct of research.

Research: Since establishing her independent laboratory, Dr. Li published the development and characterization of a mouse model that expresses oncogenic Nras^{G12D} mutation from its endogenous locus in hematopoietic tissues. She is a physician scientist with the long-term research goal to identify mechanisms of leukemogenesis in order to develop novel targeted therapies. Her research has been highlighted by quality rather than quantity, with significant publications in top journals. Dr. Li has received funding for her research through the NIH and institutional grants. She has published 26 peer-reviewed articles, and has been the recipient of numerous research awards including the University of Michigan Wicha Award for Research Excellence in 2018, the University of Michigan Department of Cell and Developmental Biology Idea Award in 2017, and the Leukemia Research Foundation Research Award in 2015. Her growing national and international reputation is evidenced by her multiple extramural invited presentations over the past five years including talks in San Diego, CA, Shanghai, China, and Dallas, TX.

Recent and Signification Publications:

Jin X, Qin T, Zhao M, Bailey N, Liu L, Yang K, Ng V, Higashimoto T, Coolon R, Ney G, Figueroa ME, and Li Q. Oncogenic N-Ras and Tet2 haploinsufficiency collaborate to dysregulate hematopoietic stem and progenitor cells. *Blood Advances*. 2018 Jun 12;2(11):1259-1271.

Chapple R, Hu T, Tseng Y, Liu L, Kitano A, Luu V, Hoegenauer K, Iwawaki T, Li, Q, Nakada D: ER α promotes murine hematopoietic regeneration through the Ire1 α -mediated unfolded protein response. *Elife*. Feb 16;7, 2018.

Burgess M, Hwang E, Firestone A, Huang T, Xu J, Zuber J, Bohin N, Wen T, Kogan S, Haigis K, Sampath D, Lowe S, Shannon K, Li Q: Preclinical efficacy of MEK inhibition in Nras-mutant AML. *Blood*. Dec 18;124(26):3947-3955, 2014.

Li Q, Bohin N, Wen T, Ng V, Magee J, Chen S, Shannon K, Morrison S: Oncogenic Nras has bimodal effects on stem cells that sustainably increase competitiveness. *Nature*. Dec 5;504(7478):143-147, 2013.

Li Q, Haigis K, McDaniel A, Harding-Theobald E, Kogan S, Akagi K, Wong J, Braun B, Wolff L, Jacks T, Shannon K: Hematopoiesis and leukemogenesis in mice expressing oncogenic NrasG12D from the endogenous locus. *Blood*. Feb 10;117(6):2022-2032, 2011.

Service: Since 2010, Dr. Li has served as an attending physician for the hematological malignancies service at Michigan Medicine. She served on the hematology consult service at the Veterans Administration Hospital from 2010-2013. In her outpatient clinic, Dr. Li cared for patients with hematologic malignancies including myeloma, lymphoma, leukemia, myelodysplastic syndrome, and other myeloid diseases. In addition to her scientific research, clinical care, and teaching, Dr. Li serves on multiple University of Michigan committees including the Blood PI Club, Leukemia Conference, and the Department of Cell and Developmental Biology Graduate Student Committee. Nationally, Dr. Li is a member of the National Comprehensive Cancer Network Guidelines MDS Panel as well as the Department of Veterans Affairs Joint Biomedical Laboratory Research Development and Clinical Science Research and Development Services Scientific Merit Review Board. She is active as an ad hoc journal reviewer as well, most recently reviewing articles for *Oncotarget*, *Journal of Clinical Investigation*, and *Aging Cell*.

External Reviewers:

Reviewer A: "I think her published work as an independent group leader is very high quality and integrates her clinical and research interests very well. She has published many seminal papers on myeloid malignancies in particular that illustrates deep scholarship in central signaling pathways that are drug targets but also are the pathways that must be targeted to prevent relapse...My opinion about Dr. Li's service and training record is that these are also exemplary-to have a fellow obtain the Hope on Wheels and St. Baldrick funding and postdocs obtaining ASH travel awards is very impressive...I believe that she would be easily promoted and tenured at my institution."

Reviewer B: "Dr. Li is a highly qualified physician and scientist. In truth, there are not many out there like her, and we'd be lucky to have her at [my institution]...She has done extremely well at every stop of her career. Moreover she has developed a strong independent career while collaborating and helping her institution. As evidence for this, she has been awarded an R01 to support her AML research...I think her work is promising and may lead to new innovations in AML treatment focusing on inhibition of signal transduction pathways."

Reviewer C: “Her work is the first in the murine model to evaluate IRE1 α signaling in stress response of normal HSCs and in pre-leukemic transformation of HSCs. This work is currently under review by (Nature Cell Biology). This work for the first time shows how stem cells can overcome stress by using UPR pathway. It impacts both clinical drug resistance of cancers and how to enhance post injury recovery of the blood system...Given her excellent research and clinical practice, active involvement in other services, her strong funding, and her scholastic knowledge, I have no doubt that she is qualified to be promoted to similar levels in other institutions.”

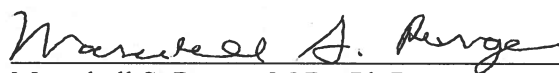
Reviewer D: “Dr. Li has an impressive funding record, particularly considering the currently challenging funding environment...As an independent investigator, she was the recipient of some of the most prestigious awards...She received her first R01 grant in 2016, which will support her lab through 2021...In my opinion, Dr. Li has met all the professional milestones that I would expect of an Assistant Professor and has met the requirements for promotion to Associate Professor with tenure.”

Reviewer E: “Dr. Li’s research is rigorous, reproducible, and of the highest quality. She is respected by researchers in the field and is able to deliver outstanding presentations at meetings...She has a clear track record of collaborating with investigators at Michigan, as well as others at outside institutions...In sum, Qing Li possesses all of the qualities and credentials that should make her a successful candidate for promotion at this time.”

Reviewer F: “Her scientific expertise and productivity significantly contributed to the greater research community, the superb environment and critical resources and services at the University, and most importantly, leukemia patients. Dr. Li has received multiple extramural grants as the principal investigator and co-investigator of a number of research projects. Her independent funding demonstrates her success as an outstanding investigator in the field of hematology/oncology.”

Summary of Recommendations:

Dr. Li is an outstanding physician scientist with a long-term research goal to identify mechanisms of leukemogenesis in order to develop novel targeted therapies. She is a rising star in her field of research and also a truly dedicated scientific educator. I am pleased, therefore, to recommend Qing Li, M.D., Ph.D. for promotion to associate professor of internal medicine, with tenure, Department of Internal Medicine, and to associate professor of cell and developmental biology, without tenure, Department of Cell and Developmental Biology, Medical School.



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

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