

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

Ryan A. Wilcox, M.D., Ph.D., assistant professor of internal medicine, Department of Internal Medicine, Medical School, is recommended for promotion to associate professor of internal medicine, with tenure, Department of Internal Medicine, Medical School.

Academic Degrees:

Ph.D.	2004	Mayo Clinic Graduate School
M.D.	2004	Mayo Clinic Medical School
B.S.	1996	Hope College

Professional Record:

2012 – Present	Assistant Professor of Internal Medicine, University of Michigan
2011 – 2012	Clinical Lecturer of Internal Medicine, University of Michigan
2009 – 2011	Assistant Professor of Medicine, Mayo Clinic

Summary of Evaluation:

Teaching: Dr. Wilcox considers his most important and rewarding teaching contributions to be laboratory-based teaching of his clinical trainees. He also teaches across the entire spectrum of students at the University of Michigan and provides continuing medical education lectures to community physicians. Dr. Wilcox dedicated himself to didactic teaching and curriculum design. He redesigned the lymphoma-related lectures given during the second year Medical School hematology course and developed accompanying cases and teacher's notes which are utilized in the small group discussions. Beginning in 2017, Dr. Wilcox organized a monthly lymphoma session for a divisional hematology conference that is attended by multiple learners, including residents, fellows, and faculty. His training of the post-doctoral fellows in his laboratory is highly individualized and takes place in various contexts including bench-side teaching, weekly one-on-one discussions about specific hypotheses and experimental approaches, and during weekly laboratory meetings and journal clubs. His excellent teaching abilities were acknowledged in 2015 when he received the "Teacher of the Year" award from the Division of Hematology/Oncology.

Research: Given that the T-cell lymphomas (TCL) are therapeutically challenging and remain an unmet medical need, it is the mission of Dr. Wilcox and his laboratory group to improve their understanding of the T-cell lymphoma pathogenesis and to translate their advances into novel therapeutic strategies that will improve outcomes for patients. His group made a significant discovery that the most common TCL in North America is comprised of two molecularly and clinically distinct subsets, one of which is characterized by chemotherapy resistance, grim overall survival, and is regulated by the transcription factor GATA-3. These discoveries have had significant implications for the classification and treatment of TCL, as demonstrated by their incorporation into the 2016 World Health Organization (WHO) classifications for lymphomas. Building on these seminal discoveries, Dr. Wilcox's group has further characterized the growth and survival cues these cells provide. Their findings have improved the understanding of T-cell lymphomagenesis, supporting a "three signal model" of disease pathogenesis which Dr. Wilcox was invited to formally articulate in the special 40<sup>th</sup> anniversary issue of the *American Journal of Hematology*. He is currently the principal investigator on five investigator-initiated clinical trials, two of which are large, multicenter studies being conducted

within the Big Ten Cancer Research Consortium. Dr. Wilcox has published 51 peer-reviewed publications, and he has been invited to present his research on ten occasions nationally and internationally. He holds one patent.

Recent and Signification Publications:

Murga-Zamalloa C, Polk A, Hanel W, Chowdhury P, Brown N, Hristov A, Bailey N, Wang T, Phillips T, Devata S, Poonnen P, Gomez-Gelvez J, Inamdar KV, Wilcox RA: Polo-like-kinase 1 (PLK-1) and c-myc inhibition with the dual kinase-bromodomain inhibitor volasertib in aggressive lymphomas. *Oncotarget*. Dec 6;8(70):114474-114480, 2017.

Boonstra P, Polk A, Brown N, Hristov A, Bailey N, Kaminski M, Phillips T, Devata S, Mayer T, Wilcox RA: A Single Center Phase II Study of Ixazomib in Patients with Relapsed or Refractory Cutaneous or Peripheral T-cell Lymphomas. *Am J Hematol*. Dec;92(12):1287-1294, 2017.

Wang T, Lu Y, Polk A, Chowdhury P, Murga-Zamalloa C, Fujiwara H, Suemori K, Beyersdorf N, Hristov A, Lim M, Bailey N, Wilcox R: T-cell receptor signaling activates an ITK/NF- $\kappa$ B/GATA-3 axis in T cell lymphomas facilitating resistance to chemotherapy. *Clin Cancer Res*. May 15;23(10):2506-2515, 2017.

Polk A, Lu Y, Wang T, Seymour E, Bailey N, Singer J, Boonstra P, Lim M, Malek S, Wilcox R: Colony-stimulating factor-1 receptor is required for nurse-like cell survival in chronic lymphocytic leukemia. *Clin Cancer Res*. Dec 15;22(24): 6118-6128, 2016.

Wang T, Feldman A, Wada D, Lu Y, Polk A, Briski R, Ristow K, Habermann TM, Thomas D, Ziesmer, S, Wellik L, Lanigan T, Witzig T, Pittelkow M, Bailey N, Hristov A, Lim, M, Ansell SM, Wilcox RA: GATA-3 expression identifies a high-risk subset of PTCL, NOS with distinct molecular and clinical features. *Blood* May 8;123(19):3007-15, 2014.

Service: Dr. Wilcox currently serves as a member of the Big Ten Cancer Research Consortium Lymphoma Malignancies clinic trial working group and as a member of the National Comprehensive Cancer Network Peripheral T-Cell Lymphoma Guidelines Review Committee. Institutionally, he is a member of the Protocol Review Committee. Dr. Wilcox is an ad hoc reviewer for numerous journals including *Oncotarget*, *Blood*, the *American Journal of Hematology*, and *Leukemia*. He is an attending physician in the hematologic malignancies group with specific expertise in the management of T-cell lymphoproliferative disorders including peripheral and cutaneous T-cell lymphomas. Dr. Wilcox has a weekly lymphoma clinic and attends four to six times annually on the outpatient multidisciplinary lymphoma clinic.

External Reviewers:

Reviewer A: "Dr. Wilcox's CV reflects the sustained capacity to secure the independent funding which started with K08 and currently includes LLS grant. In addition, he has been successful to elicit funding from pharma partners to open and conduct investigator-initiated studies...Form [sic] his scientific productivity, it is clear, that Dr. Wilcox is focused, creative, and hard-working... Dr. Wilcox has convincingly demonstrated his capacity to be a translational researcher and his work is at great standing compared to his peers."

Reviewer B: "His effort towards investigator-initiated clinical trials is impressive, in some instances the clinical trials emanate from his laboratory's studies. These clinical protocols could have a lasting impact on the management of T-cell lymphomas...Dr. Wilcox has played an active role in this effort

with multi-institutional collaborations. Unlike B-cell lymphomas, T-cell neoplasms are resistant to current standard chemotherapy agents. In this regard, Dr. Wilcox is a rising star in this field and his work is at the cutting edge...Dr. Wilcox would be appropriate for promotion and tenure at [my current institution] or at [my former institution].”

Reviewer C: “I am familiar with Dr. Wilcox’s contributions to our field and several of his relevant publications. He is a solid investigator who has contributed to our understanding of T Cell malignancies. He has received competitive peer reviewed funding for his research and has the talent to emerge as a leader in the field. I feel he meets the criteria for promotion with tenure at the University of Michigan.”

Reviewer D: “Dr. Wilcox has excelled as a clinical and translational/laboratory investigator...He and his group have made significant advances in improving understanding of these diseases, identifying novel therapeutic targets, particularly associated with the T-cell receptor and translating those advances to clinical investigation. He has an impressive record of past and on-going grant funding, has several other substantial grants under consideration at present, and has an impressive record of publication in high impact factor journals...Based on my observation of Dr. Wilcox’s work, there is no question that he would easily be at the top of his peer group working in this area of investigation.”

Reviewer E: “Dr. Wilcox is highly collaborative and already has 51 peer-reviewed publications with investigators from around the country...He is working in an area that is understudied and has begun to make contributions across the spectrum of basic research through clinical trials and outcomes in the area of T-cell Lymphoma...He also appears to be an outstanding citizen and has collaborated both in his own institution and nationally on important advances. We certainly would welcome someone with his expertise and focus at our institution and I would be supportive of his promotion to Associate Professor with Tenure.”

Summary of Recommendations:

Dr. Wilcox is a rising star in the field of T-Cell Lymphoma research and the work that he and his laboratory have produced has contributed significantly to the understanding of this understudied disease. He is an outstanding educator and clinician. I am pleased, therefore, to recommend Ryan A. Wilcox, M.D., Ph.D. for promotion to associate professor of internal medicine, with tenure, Department of Internal Medicine, Medical School.



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