

PROMOTION RECOMMENDATION
THE UNIVERSITY OF MICHIGAN
MEDICAL SCHOOL
DEPARTMENT OF SURGERY

Jules Lin, M.D., assistant professor of surgery, Department of Surgery, Medical School, is recommended for promotion to associate professor of surgery, with tenure, Department of Surgery, Medical School.

Academic Degrees:

M.D.	1999	Harvard University
B.A.	1995	Indiana University

Professional Record:

2008-present Assistant Professor of Surgery, University of Michigan

Teaching: Dr. Lin has demonstrated significant dedication to education. He has been an active and engaged faculty liaison (i.e. facilitator) for M3 and M4 medical students during their surgical clerkships, meeting on at least a weekly basis for dedicated one-on-one or small group sessions to review general and thoracic surgery topics and to provide mid-rotation and summative feedback for each student. In addition to being an excellent “bedside” teacher in the clinic and the operating room, Dr. Lin is a regular lecturer for the thoracic surgery residency didactic series. He has been a leader for the thoracic surgery residency in incorporating simulation, specifically for airway anastomoses and lung transplantation, into the thoracic surgery didactic program. He is sought out regularly and consistently as a mentor for undergraduates, medical students and residents. Notably, he has mentored surgical residents not only in terms of facilitating research projects but also by engaging such residents in medical student small group didactics, as part of the departmental “Resident as Educator” effort, and their work has culminated in national and regional presentations as well as several research awards. His dedication to resident education is reflected by his selection for the 2014 Mark B. Orringer Cardiothoracic Resident Teaching Award, indicating his recognition as the most outstanding educator bestowed each year solely by the thoracic surgery residents.

Regionally and nationally, Dr. Lin is an ongoing contributor in curriculum design and development. He developed the educational module for tracheal and airway surgery that is included in the nationally distributed curriculum for thoracic surgery residents. This area was identified as a knowledge gap based on residency graduate performance during thoracic surgery qualification and certification examinations. He also serves as a topic editor for *Benign Esophageal Diseases* on the editorial board for the Joint Council for Thoracic Surgery Education (JCTSE) Thoracic Surgery Online Curriculum, which is utilized nationally, including at the University of Michigan, as an important element of resident education.

Research: Dr. Lin's research has focused on the treatment of esophageal cancer and particularly identifying mechanisms central to treatment resistance for this particularly lethal disease. He has received intramural funding as well as an extramural career development award for his study of potential therapeutic targets such as Dickkopf-3 and connective tissue growth factor (CTGF), downstream mediators of the Transforming Growth Factor-beta (TGF- β) signal transduction pathway, that he has shown are associated with chemoresistance and increased tumor invasion. He is leading an ongoing collaboration with colleagues in gastroenterology to obtain pre-treatment tissue and serum from esophageal cancer patients and has banked samples from more than 80 subjects which will be used to validate potential therapeutic targets identified in further pre-clinical studies.

Dr. Lin also has sought to improve esophageal cancer care systematically. He has developed and championed the implementation of complication care pathways for those patients who suffer complications following esophagectomy. This work has been recognized nationally and has been presented internationally (University of Toronto). Dr. Lin's publications are cited widely. Since his appointment in 2008, he has had 40 peer-reviewed publications, including six as first or senior corresponding author, as well as several articles in high impact publications including *Nature Genetics*, *Nature Nanotechnology*, *Nature Communications* and the *Proceedings of the National Academy of Sciences*, indicating his contribution to multi-institutional collaborative projects.

Recent and Significant Publications:

Dulak AM, Stojanov P, Peng S, Lawrence MS, Fox C, Stewart C, Bandla S, Imamura Y, Schumacher SE, Shefler E, McKenna A, Carter SL, Cibulskis K, Sivachenko A, Saksena G, Voet D, Ramos AH, Auclair D, Thompson K, Sougnez C, Onofrio RC, Guiducci C, Beroukhim R, Zhou Z, Lin L, Lin J, Reddy R, Chang A, Landrenau R, Pennathur A, Ogino S, Luketich JD, Golub TR, Gabriel SB, Lander ES, Beer DG, Godfrey TE, Getz G, Bass AJ: Exome and whole-genome sequencing of esophageal adenocarcinoma identifies recurrent driver events and mutational complexity. *Nat Genet* 45:478-486, 2013.

Antonoff MB, Verrier ED, Yang SC, Lin J, DeArmond DT, Allen MS, Varghese TK, Sengewald D, Vaporciyan AA: Online learning in thoracic surgical training: Promising results of multi-institutional pilot study. *Ann Thorac Surg* 98:1057-1063, 2014.

Ettinger DS, Wood DE, Akerley W, Bazhenova LA, Borghaei H, Camidge DR, Cheney RT, Chirieac LR, D'Amico TA, Demmy TL, Dilling TJ, Govindan R, Grannis FW Jr, Horn L, Jahan TM, Komaki R, Kris MG, Krug LM, Lackner RP, Lanuti M, Lilenbaum R, Lin J, Loo BW Jr, Martins R, Otterson GA, Patel JD, Pisters KM, Reckamp K, Riely GJ, Rohren E, Schild S, Shapiro TA, Swanson SJ, Tauer K, Yang SC, Gregory K, Hughes M: Non-small cell lung cancer, Version 6.2015. *J Natl Compr Canc Netw* 13:515-524, 2015.

Wang Z, Lin L, Thomas DG, Nadal E, Chang AC, Beer DG, and Lin J: The role of Dickkopf-3 overexpression in esophageal adenocarcinoma. *J Thorac Cardiovasc Surg* 150:377-385, 2015.

Lin J, Myers AL, Wang Z, Nancarrow DJ, Ferrer-Torres D, Handlogten A, Leverenz K, Bao J, Thomas DG, Wang TD, Orringer MB, Reddy RM, Chang AC, Beer DG, Lin L: Osteopontin (OPN/SPP1) isoforms collectively enhance tumor cell invasion and dissemination in esophageal adenocarcinoma. *Oncotarget* 6:22239-22257, 2015.

Service: Dr. Lin has demonstrated outstanding citizenship. In addition to ad hoc peer review provided for well-regarded surgical journals, he serves on the editorial board for the online thoracic surgery curriculum, sponsored by the Joint Council on Thoracic Surgery Education and is a member and reviewer for the Research Committee of the Thoracic Surgery Foundation for Research and Education. These two organizations represent the national education interests for thoracic surgery with the missions of improving thoracic surgery education and of sponsoring high impact research in the areas of general thoracic and cardiovascular surgery. Most recently, Dr. Lin was selected as a member of the National Comprehensive Cancer Network clinical practice guidelines panels for non-small lung cancer, thymic disease and malignant mesothelioma.

Clinically, Dr. Lin has been outstanding. Even while he regularly accomplishes his educational and research objectives, he has continued to achieve and oftentimes exceed the clinical activity goals established for him on a yearly basis. Since his appointment as surgical director for the Lung Transplantation Program, the program has maintained excellent patient and graft survival while remaining in the top quarter of programs nationally in terms of operative volume. He has been an advocate for regional implementation of the ex vivo lung perfusion (EVLP) program, a multi-institutional effort to increase donor lung utilization while minimizing risk to transplant recipients. His willingness to collaborate with others in research reflects his affability as a surgical consultant working with referring physicians and other hospital services.

External Reviewers:

Reviewer A: "His works on Dickkopf-3 and osteopontin are particularly important as the majority of patients with esophageal adenocarcinoma die of metastatic disease...He is recognized and respected nationally for his scholarship, teaching and educational contributions."

Reviewer B: "Jules has demonstrated exceptional and sustained commitment to education and curricular development locally and nationally...Jules has demonstrated significant achievements in conducting and participating in basic and clinical research...His involvement at the local and national levels is a testament to his dedication in pushing forward needed curricular changes in resident education."

Reviewer C: "Dr. Lin is nationally recognized as a superb clinical surgeon....His opinions in clinical surgery are widely sought by his peers on a national level. His presence at the University of Michigan has helped make it one of the premiere thoracic surgical programs in the United States....He has clearly demonstrated a sincere commitment to surgical education and has achieved a level of excellence in this regard that brings great recognition to himself and the University of Michigan...he has had a consistently strong presence on a national level

and is viewed as an outstanding role model for academic thoracic surgeons. His scholarly productivity is excellent and the contributions that his work has made has [sic] advanced the clinical practice as well as the basic science of thoracic surgery.”

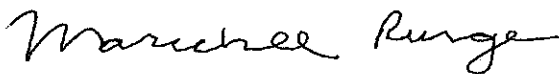
Reviewer D: “His clinical acumen and technical skills would certainly put him on par with anyone who is being considered for promotion to Associate Professor...He is a person who is in command of his topic, knowledgeable, articulate and able to communicate his message to his audience...His recent work in the area of adenocarcinoma of the esophagus has been recognized and certainly will be an important contribution in this field.”

Reviewer E: “He is well-established in esophageal cancer, has demonstrated scholarly ability and achievements that have positively impacted the field, advanced the thoracic surgery program at your institution through his work as an educator, and serves actively and effectively in professional societies...he has discovered novel biomarkers and molecular-driven pathways in esophageal carcinogenesis to help diagnose and treat the disease.”

Reviewer F: “...I have found him to be knowledgeable, organized, well-prepared and a pleasure to work with...I have witnessed his teaching, have read and am familiar with some of his scholarship, and his CV clearly attest to his strength and involvement in institutional service. Dr. Lin clearly has a growing national reputation...”

Summary of Recommendation:

Dr. Lin is a nationally renowned thoracic surgeon who has made numerous contributions to his profession, with emphasis on the study and care of patients with esophageal cancer and developing innovative teaching methods for complex thoracic surgery problems. He has presented his work at peer institutions and is gaining international recognition as well. His thoracic surgery practice is highly productive and is the basis for his research and educational accomplishments. I am pleased to recommend Jules Lin, M.D. for promotion to associate professor of surgery with tenure, Department of Surgery, Medical School.



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

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