

PROMOTION RECOMMENDATION
THE UNIVERSITY OF MICHIGAN
MEDICAL SCHOOL
DEPARTMENT OF SURGERY

Rishindra M. Reddy, 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.	2000	Northwestern University
B.S.	1996	Northwestern University

Professional Record:

2009-present	Assistant Professor of Surgery, University of Michigan
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Summary of Evaluation:

Teaching: Dr. Reddy has demonstrated unwavering and enthusiastic commitment to student, resident and post-graduate education. He has received several teaching awards from the University of Michigan medical students in recognition of his teaching ability, most notably the Silver Shovel Award, awarded annually by the Galens Medical Student Society to the Most Outstanding Clinical Teacher. As assistant director for the M3 surgery clerkship and M4 surgical subintern program, he has been instrumental in coordinating rotation assignments and assessment of these medical students; earlier this year he was appointed as director of the M3 surgery clerkship. Dr. Reddy provides mentorship in the thoracic oncology laboratory as well as for multiple clinical projects. With his guidance, many of his mentees have pursued research projects that have culminated in national presentations and/or first author peer-reviewed publications.

Dr. Reddy is engaged actively in curriculum design, co-authoring modules such as the M4 Multidisciplinary Thoracic Oncology elective, and the Thoracic Surgery Robotic Curriculum, which outlines simulation practice and graduated technical experience for four key thoracic surgery cases performed with the DaVinci robot. He has collaborated with colleagues from the Department of Industrial and Operations Engineering and the Center for Healthcare Engineering and Patient Safety (CHEPS) to study how implementing a flexible call schedule might improve surgical resident education in terms of maximizing the resident operative case portfolio for uncommon operations such as thoracic organ transplantation. This work represents a novel approach to surgical resident education, for which he and his colleagues have obtained funding from intramural source. Nationally, Dr. Reddy designed and curates the Pleural Diseases component of the Joint Council for Thoracic Surgery Education (JCTSE) resident curriculum.

Research: Dr. Reddy has identified several areas of research focus since his faculty appointment. Continuing his interest in thoracic malignancies, he has focused his efforts on improving the diagnosis and treatment of both non-small cell lung cancer and esophageal cancer. He has developed expertise in tissue procurement for lung cancer with the goal of developing patient derived xenografts in order to facilitate collaborative studies with medical and radiation oncology to identify novel candidates for targeted lung cancer therapy. He continues to pursue collaborative projects, for example working with Dr. Sunitha Nagrath, Department of Chemical Engineering, and Dr. Nithya Ramnath, one of our medical oncologists, to utilize a novel microfluidic platform for the identification of circulating tumor cells (CTCs), particularly whether sampling of pulmonary venous blood, obtained at the time of lung cancer resection, provides a greater yield of tumor-specific CTCs than that detectable in peripheral venous blood.

Dr. Reddy's work is well-cited. Since his appointment in 2009, he has had 35 peer-reviewed publications, including 19 as first or senior corresponding author, as well as several articles in high impact publications including *Nature Genetics* and *Small*, indicating his contribution to multi-institutional collaborative projects.

Recent and Significant Publications:

Grabauskiene S, Bergeron EJ, Chen G, Chang AC, Lin J, Thomas DG, Giordano TJ, Beer DG, MA, Reddy RM: CHK1 levels correlate with sensitization to pemetrexed by CHK1 inhibitors in non-small cell lung cancer cells. *Lung Cancer* 82:477-484, 2013.

Bergeron EJ, Lin J, Chang AC, Orringer MB, Reddy RM: Endoscopic ultrasound is inadequate to determine which T1/T2 esophageal tumors are candidates for endoluminal therapies *J Thorac Cardiovasc Surg* 147:765-773, 2014.

Murlidhar V, Zeinali M, Grabauskiene S, Ghannad-Rezaie M, Wicha MS, Simeone DM, Ramnath N, Reddy RM, Nagrath S: A radial flow microfluidic device for ultra- high-throughput affinity-based isolation of circulating tumor cells. *Small* 10:4895-4904, 2014.

Chung J, Obi A, Chen R, Lin W, Sen S, Chen Z, Gulati A, Pozehl W, Seagull FJ, Cohn AM, Daskin MS, Reddy RM: Estimating minimum program volume needed to train surgeons: When 4x15 really equals 90. *J Surg Educ* 72:61-67, 2015.

Meza J, Rectenwald J, Reddy RM: The perceived bias against integrated cardiothoracic surgery residency applicants during their general surgery interviews: Are we hurting a generation of strong candidates? *Ann Thorac Surg* 99:1206-1212, 2015.

Service: Dr. Reddy has been an active member of the Medical School and university community, including service on the program evaluation committee for the thoracic surgery residency as well as the clinical competency committee for junior general surgery residents, quality improvement for the Cardiovascular Center Operating Rooms, and ongoing participation in the ongoing Medical School curriculum revision. Nationally, he participates in the educational and mentorship committees for several major surgical and educational societies, and

chairs several task forces for the Society of Thoracic Surgeons as well as the Membership Committee for the Association of Surgery Education. In particular, he is viewed nationally as a key driver for fostering medical student and resident mentorship and is chair for the Looking to the Future program of The Society for Thoracic Surgeons and the American Association for Thoracic Surgery.

Clinically, Dr. Reddy has been outstanding. He regularly achieves and very often exceeds his yearly clinical activity goals, and his activity represents a significant portion of service provided by the Section of Thoracic Surgery. Even with this workload, he has been able to excel in his research and educational objectives. His enthusiasm for collaboration and mentorship in research and education reflects his approach to developing collegial relationships as a surgical consultant working with referring physicians and other hospital services. Furthermore, as dynamic as he has been in terms of developing productive research collaborations and fostering surgical education, he also has been an enthusiastic citizen within the Section of Thoracic Surgery, leading the outpatient and inpatient staff to improve clinic and service efficiency while adhering to the principles of providing compassionate and timely patient care.

External Reviewers:

Reviewer A: “Dr. Reddy has quickly established himself as a national leader in thoracic surgery. He is recognized as an innovative thought leader and a true (star) of academic surgery. His expertise is widely sought by the professional societies and he is [sic] consistently brought great recognition to the University of Michigan....He is one of the leaders of robotic thoracic surgery on a national level and widely sought as an educator of others who seek to learn about robotic surgery. The University of Michigan is clearly fortunate to have an outstanding surgeon of the caliber of Dr. Reddy....Given his national prominence as an outstanding surgical educator, the specialty of thoracic surgery, quite frankly, looks to Dr. Reddy to help lead its educational initiatives for the next generation of surgeons.”

Reviewer B: “...we would be proud to have him on our faculty for not only what he brings as a clinician, skilled surgeon, nationally recognized educator and researcher, but as an example of what we need more of in our field currently; a compassionate person with a great personality that medical students and residents can use as a role model and mentor for the future.”

Reviewer C: “It is difficult to determine if he is having a greater impact on the basic science of lung cancer or the education of thoracic surgery residents. They both are transformational... Dr. Reddy has brought to light several issues facing our training programs that resulted in dramatic improvements.”

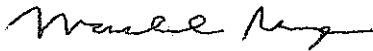
Reviewer D: “He has chosen to focus on various aspects of thoracic oncology, and he has found novel molecular targets to use new therapeutics for the treatment of lung cancer....I am very enthusiastic about Dr. Reddy’s accomplishments thus far, and I remain extremely excited about his potential for future accomplishments and his ability to garner recognition for himself, his department, and his institution.”

Reviewer E: "...Dr. Reddy is extremely respected within our field of General Thoracic Surgery. He is clearly destined to be a leader within our field, and I would guess that efforts to retain him on the faculty of the University of Michigan would be a priority."

Reviewer F: "He is clearly quite dedicated to medical education, and I believe that he is now fulfilling his promise as an educator, in addition to becoming an independent investigator and an expert clinician....It is very clear to me that Dr. Reddy is without a doubt one of the rising stars in Thoracic Surgery in the country."

Summary of Recommendation:

Dr. Reddy is a highly-respected and well-regarded thoracic surgeon who has achieved national recognition for his contributions to thoracic surgery education and lung cancer research. His achievements have focused on student and resident education, mentorship and collaborative cancer research. He is considered by leaders in the field and his peers as a superb educator, innovative clinician-scientist and outstanding thoracic surgeon. His thoracic surgery practice is highly productive and is the foundation for his accomplishments in research and education. I am pleased to recommend Rishindra M. Reddy, 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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