Approved by the Regents May 20, 2010

PROMOTION RECOMMENDATION UNIVERSITY OF MICHIGAN MEDICAL SCHOOL DEPARTMENT OF SURGERY DEPARTMENT OF MEDICAL EDUCATION

<u>Rebecca M. Minter, M.D.</u>, assistant professor of surgery, Department of Surgery, and assistant professor of medical education, Department of Medical Education, Medical School, is recommended for promotion to associate professor of surgery, with tenure, Department of Surgery, and associate professor of medical education, without tenure, Department of Medical Education, Medical School.

Academic Degrees:

M.D. 1996 University of Texas Southwestern Medical School

B.A. 1992 University of Denver

Professional Record:

2005-present Assistant Professor of Medical Education, University of Michigan

2004-present Assistant Professor of Surgery, University of Michigan,

2003-2004 Clinical Instructor, Department of Surgery, University of Michigan

Summary of Evaluation:

Teaching: Dr. Minter maintains a full lectureship schedule and provides mentorship for medical students, residents and junior faculty as well as didactic lectures for medical students and residents. Dr. Minter's focus on the development and validation of innovative competency-based teaching methods for surgical training includes examination and curriculum development. In 2006, her curriculum development included a proficiency-based laparoscopic skills curriculum for entering surgical residents along with the development and administration of a skills curriculum for M3 students on surgery clerkship to include knot tying, line placement, management of airway, breathing, circulation, and scrubbing/gowning/gloving/sterile technique. In 2006, her examination development included the United States Medical Licensing Exam (USMLE) Step 1 Standard Setting Panel-Hofstee Approach and American Board of Surgery Examination Consultant for Inservice Training Examination (ABSITE) Committee (write and review questions for ABSITE). In 2007, Dr. Minter introduced a validated, proficiency-based open skills curriculum for University of Michigan resident training and developed a professional development seminar series for surgical residents which meet bi-monthly with discussions centered on topics selected by the chief resident and faculty guest speaker. In 2008, she refined and developed a new evaluation approach for the University of Michigan, Department of Surgery M3 Oral Exam, in addition to the development and introduction of a basic suturing curriculum for M3 students rotating on the surgery clerkship. In 2009, Dr. Minter developed and introduced a surgical anatomy week-long component within the M4 Surgery Bootcamp elective providing students matching into surgical specialties with the skills they will require to excel and provide optimal patient care when they start their surgery internship. Dr. Minter's dedication to surgical and medical education is amply documented by her numerous offices and committee positions. She is actively involved on a national level with the Association of American Medical Colleges (AAMC), the Accreditation Council for Graduate Medical Education (ACGME), the American College of Surgeons (ACS), and the Council on Graduate Medical Education (COGME). Her recognition for outstanding teaching is clearly demonstrated by her receiving the University of Michigan Surgical Silver Scalpel Teaching Award in 2005 and the prestigious Association for Surgical Education's National Outstanding Teacher Award in 2009. She has participated in six funded educational grants and has published seven peer-reviewed papers in this area of investigation.

Research: Dr. Minter has established herself academically in both basic science and surgical education and educational research. Her basic science research is focused on improved understanding and therapeutic manipulation of the underlying immune defects present in the setting of biliary obstruction and chronic liver failure. Dr. Minter's surgical education research is focused on the development and validation of innovative competency based teaching methods for use in the undergraduate and graduate medical education environment. Dr. Minter is principal investigator on a K08 grant titled "Immunomodulation of Sepsis in Biliary Obstruction" funded by NIH/NIGMS. She has been a co-investigator on four University of Michigan GME Innovation grants which are renewed annually. Dr. Minter has four published book chapters and 32 peer-reviewed publications in such prestigious journals as Journal of Immunology, PNAS, and the American Journal of Physiology. She is currently an ad hoc reviewer for nine journals, including World Journal of Surgery and American Journal of Surgery. She co-edited a book published by McGraw Hill in 2009 titled Current Procedures: Surgery. Dr. Minter has been an invited speaker with 27 national and international presentations and 33 scientific presentations. In 2005, Dr. Minter was the recipient of the Society of University Surgeons Junior Faculty Grant Award. Dr. Minter's research efforts have resulted in one patent pending and two tech transfers. Application with UM Tech transfer #3771 is the development of a web-based Dynamic Bayesian Environment for Learning Relationships and Making Predictions from Biomedical Data (www.minituba.org) which is utilized by investigators from around the world. Application with UM Tech Transfer #4267 enables further development of a novel open training system employing MEMS inertial sensors and motion analysis of surgical instruments.

Recent and Significant Publications:

Minter RM, Bi X, Ben-Josef G, Arbabi S, Hemmila MR, Wang SC, Remick DG, and Su GL: LPS-Binding Protein mediates LPS induced liver injury and mortality in the setting of biliary obstruction. *Am J Physiol Gastrointest Liver Physiol* 296(1):G45-54, 2009.

Boom-Saad Z, Langenecker SA, Bieliauskas LA, Graver CJ, O'Neill JR, Caveney AF, Greenfield LJ, and Minter RM. Surgeons outperform normative controls on neuropsychological tests, but age-related decay of skills persists. *Am J Surg* 195(2):205-209, 2008.

Woodrum DT, Andreatta PB, Yellamanchili RK, Feryus L, Gauger PG, and Minter RM. Construct validity of the LapSimTM laparoscopic surgical simulator. *American Journal of Surgery* 191(1):28-32, 2006.

Andreatta PB, Woodrum DT, Birkmeyer JD, Yellamanchili RK, Doherty GM, Gauger PG, and Minter RM. Laparoscopic skills are improved with LapMentorTM training: results of a randomized, double-blinded study. *Annals of Surgery* 243(6):854-860, 2006.

Minter RM, Fan MH, Sun JM, Niederbichler A, Ipaktchi K, Arbabi S, Hemmila MR, Remick DG, Wang SC, and Su GL. Altered Kupffer cell function in biliary obstruction. *Surgery* 138(2):236-245, 2005.

Service: Dr. Minter's interest and dedication to undergraduate and graduate medical education is apparent and evidenced by her involvement in numerous committees and organizations. She has received appointments to the following departmental and Medical School committees: Clinical Simulation Center Operations Committee, Graduate Medical Education Internal Review, Medical Student Component 3/4 Committee, and Medical Student Academic Review Board. Dr. Minter served as the Department of Surgery Associate Medical Student Clerkship Director from 2005-2008 and is currently serving as director. The Council on Graduate Medical Education (COGME) was authorized by Congress to provide an ongoing assessment of physician workforce trends, training issues and financing policies, and to recommend appropriate federal and private sector efforts to address identified needs. Dr. Minter was appointed as a member to the COGME from 2003-2007. Since its inception in 1986, Dr. Minter is only one of three general surgeons ever appointed to the council on Graduate Medical Education (COGME) by the United States Department of Health and Human Services. She also serves as an examination consultant for both the American Board of Surgery and the National Board of Medical Examiners. Other positions currently held by Dr. Minter include: American College of Surgeons Entering Surgery Resident Prep Curriculum Committee (chair), Association for Academic Surgery Grant Review Committee (co-chair), Society of University Surgeons Social and Legislative Issues Committee (chair), and Fellowship Council Accreditation Committee (chair).

External Review:

<u>Reviewer A</u>: "...Dr. Minter has achieved a high level of national prominence in surgical education...I would say that her educational activities place her in the top 1% of faculty in U.S. departments of surgery and I predict that her national impact in surgical education and beyond is and will continue to be highly significant."

<u>Reviewer B</u>: "Perhaps the greatest tribute I can give to Rebecca is that she is the type of surgical faculty member that any Chair would love to have as a member of their faculty. She has clearly made remarkable contributions to surgical education at the University of Michigan and is making significant contributions to the field nationally in a large number of organizations."

<u>Reviewer C</u>: "Dr. Minter is a rising academic star and would be promoted at this time to Associate Professor at [my institution]."

<u>Reviewer D</u>: "...I have been impressed with Dr. Minter's grasp of important issues in surgical education and creativity when approaching education research ideas and national curricular reform. At national meetings she is a recognized leader in these areas, presenting important work...to a variety of audiences."

<u>Reviewer E</u>: "I have great respect for Rebecca's contributions and feel that she is substantially impacting our field in many ways. More importantly I have seen her high quality leadership skills...and feel confident in predicting that she clearly has what it takes to be a leader of American surgery."

<u>Reviewer F</u>: "...Dr. Minter is developing a fine reputation as one of the foremost surgical educators on the national scene."

Reviewer G: "It is clear that her work is respected national[ly] by her appointment to committee chair positions in both the Association for Academic Surgery and the Society of University Surgeons."

<u>Reviewer H</u>: "Dr. Minter is one of only a handful of academic surgeons [of her cohort] around the country who are actively shaping how we train surgeons in the future."

Summary of Recommendation:

Dr. Rebecca Minter is well respected by her colleagues and considered to be an outstanding clinician and top national leader in surgical education. I strongly recommended her for promotion to associate professor, with tenure, Department of Surgery, and associate professor, without tenure, Department of Medical Education.

James O. Woolliscroft, M.D.

Dean

Lyle C. Roll Professor of Medicine

May 2010