

PROMOTION RECOMMENDATION
UNIVERSITY OF MICHIGAN MEDICAL SCHOOL
DEPARTMENT OF INTERNAL MEDICINE

Sanjay K. Saint, M.D., M.P.H., Associate Professor of Internal Medicine, with tenure, Department of Internal Medicine, Medical School, is recommended for promotion to Professor of Internal Medicine, with tenure, Department of Internal Medicine, Medical School.

Academic Degrees:

M.P.H.	1998	University of Washington
M.D.	1992	UCLA
B.S., B.A.	1988	University of California, Irvine

Professional Record:

2002-Present	Associate Professor of Internal Medicine, University of Michigan
1999-2002	Assistant Professor of Internal Medicine, University of Michigan
1998-1999	Lecturer, Department of Internal Medicine, University of Michigan
1995-1996	Clinical Instructor of Medicine, University of California - San Francisco

Summary of Evaluation:

Teaching: Since joining the University of Michigan faculty, Dr. Saint has been recognized as among the very best teachers in the Department of Internal Medicine. In addition to his teaching activities while an inpatient ward attending, he has also been actively engaged in formal didactic teaching sessions with students. Dr. Saint has given a one-hour quarterly lecture entitled "An Approach to Anemia" as part of the Core Lecture Series for third-year medical students. Dr. Saint has held weekly one-hour sessions with the medical students during their medicine clerkship at the VA Medical Center in which he discusses various topics. He also serves as a Clinical Advisor to fourth-year medical students going into internal medicine, formally advising about five students per year (informally advising a handful more). Dr. Saint has been honored extensively for his teaching at the University of Michigan, receiving several major medical school and departmental awards in the last several years. These awards include: the 2002 University of Michigan Medical School's "Senior Award" from the graduating seniors; the 2002 "Silver Shovel Award" from the Galens Medical Society; and the 2003 Department of Internal Medicine's H. Marvin Pollard Award for Outstanding Resident Teaching. He also received the 2004 Kaiser Permanente Award for Excellence in Clinical Teaching. Finally, he has been one of the top teachers in the department as judged by students and house staff for the past five years.

Research: Dr. Saint's research career has continued to flourish at the University of Michigan. He has received independent extramural funding from both foundations and federal agencies and has 99 peer-reviewed publications with seven additional publications already accepted. Dr. Saint's research is in the general area of health services research, with a particular interest in clinical

research involving important patient safety problems. He has quickly emerged as a national and international expert in the area of catheter-related infection prevention and patient safety. He has published several seminal articles evaluating the efficacy and cost-effectiveness of various methods of reducing catheter-related infections. His work has led to a major and notable change in clinical practice which likely will lead to fewer patients suffering from a life-threatening hospital-acquired infection. Next, he formed the team that performed a rigorous economic assessment of maximal sterile barriers, another method for preventing catheter-related infection. This study also has been an important contribution to the patient safety literature. Finally, Dr. Saint has begun to explore the dynamic effects that resident work hours may have on patient safety. Dr. Saint closely mentored a very junior first author who performed a landmark systematic assessment of the possible patient-related effects of work hour restrictions. Given the importance of this work, it is not surprising that Dr. Saint has been very successful in obtaining extramural grant support. He has received funding from the National Institutes of Health, the Agency for Healthcare Research and Quality, the California Healthcare Foundation, the Blue Cross Blue Shield of Michigan Foundation, and the Department of Veteran's Affairs. As principal investigator, Dr. Saint has received a three-year competitive award from the national Health Services Research and Development Division of the Department of Veteran Affairs that will provide him with full salary support in order for him to continue his ambitious research agenda and an R21 grant from the NIH. Additionally, he is a co-principal investigator on two other recently obtained peer-reviewed grants. He is also completing work on a NIH Developmental Center grant on patient safety, in which he serves as co-principal investigator. In addition to the receipt of important foundation and federal grants, Dr. Saint's research efforts have been recognized in the form of invited national and international talks, including Tokyo, London, Toronto, Barcelona, and Rome. Additionally, he has given invited lectures at numerous national meetings, and serves on numerous editorial boards. Finally, Dr. Saint has been a reviewer for several granting agencies, including ones for the National Institutes of Health (NIH), Agency for Healthcare Research and Quality (AHRQ), and the Centers for Disease Control and Prevention (CDC). In 2004, he served as Chair of a Special Emphasis Panel for the CDC.

Recent and Significant Publications:

Hu KK, Veenstra DL, Lipsky B, Saint S: Use of maximal sterile barriers during central-venous catheter insertion: Clinical and economic outcomes. *Clin Infect Dis* 39:1441-1445, 2004.

Fletcher KE, Davis SQ, Underwood W, Mangrulkar RS, McMahon LF, Saint S: Systemic review: Effects of resident work hours on patient safety. *Ann Intern Med* 141(11):851-857, 2004.

Chaiyakunapruk N, Veenstra DL, Lipsky BA, Sullivan SD, Saint S: Vascular catheter site care: The clinical and economic benefits of chlorhexidine compared to povidone iodine solution. *Clin Infect Dis* 38:764-771, 2003.

Bent S, Nallamotheu NK, Simel D, Fihn SD, Saint S: Does this woman have an acute, uncomplicated urinary tract infection? *JAMA* 287(20):2701-2710, 2002.

Chaiyakunapruk N, Veenstra DL, Lipsky BA, Saint S: Chlorhexidine compared with povidone-iodine solution for vascular catheter-site care: A meta-analysis. *Ann Intern Med* 136(11):792-801, 2002.

Service: Since 1999, Dr. Saint has served as the Co-Chair of the Adverse Events Committee (now called the Safety Case Management Committee) at the Ann Arbor VA Medical Center. As Director of the Patient Safety Enhancement Program since 2001, he has taken a leadership role in patient safety both locally and nationally. In addition to these leadership activities, Dr. Saint has been an active member of the following important committees at the University of Michigan: Conflict of Interest Board, Medical School Admissions Committee, Patient Safety Committee, and the Clinical Quality Committee. Additionally, he was a member of the Ann Arbor VAMC's Institutional Review Board from 2003 to 2005. He has recently been named Senior Associate Chief of the Division of General Medicine. Dr. Saint has also been extremely active nationally in administrative service. He has served as Chair of several national committees, including: the Health Care Research/Epidemiology Committee of the Central Society for Clinical Research; the Scientific Abstract Selection Committee of the Society of Hospital Medicine; the Hospital Medicine Abstract Review Committee of the Society of General Internal Medicine; the Research Committee of the Society of Hospital Medicine; the Journal Task Force of the Society of Hospital Medicine; and the Discontinuity-of-Care Task Force of the Society of Hospital Medicine.

Professional Work: Dr. Saint is noted to be a first-rate clinician. He has already co-authored several books intended for use by medical students, house staff, and practicing physicians. In addition, the second edition of his book, "*Pocket Guide to the Essentials of Diagnosis and Treatment*," is currently in press. His book entitled "*Saint-Frances Guide to Inpatient Medicine*," is one of the first medical books distinguishing between inpatient and outpatient care. Indeed, the success of his "*Saint-Frances Guide to Inpatient Medicine*," has led to the "*Saint-Frances Guide*" series of clinical manuals (seven clinical manuals, in total) for which he serves as series editor. His books have sold over 50,000 copies and have been translated into several languages. Dr. Saint has served as a medical ward attending for 2-4 months per year. He is also special correspondent to the *New England Journal of Medicine* where he has co-authored over 20 articles in the Clinical Problem-Solving section. These clinically-based educational exercises, read by hundreds of thousands of clinicians all over the world, explore the cognitive aspects of how clinicians diagnose patients.

External Review:

Reviewer A: "I believe that his leadership qualities and ambition for excellence make him destined to be a Chair of Internal Medicine at a major university....Dr. Saint is brilliant, disciplined, and a natural leader."

Reviewer B: "...Dr. Saint is a stellar tenure track faculty member who has established an enviable and consistent track record of excellence in research, education, and service, as well as a strong national reputation. He is extremely well regarded by chiefs of general internal medicine nationally and is someone who would be highly sought by any institution as a candidate for a leadership position in general internal medicine or health services (or clinical) research."

Reviewer C: “I would rank Dr. Saint as the leading hospitalist researcher in the country...On a broader scale within the whole entire field of general internal medicine, he also ranks extremely high.”

Reviewer D: “His stature as a clinician educator is unsurpassed and, several years in a row, he has received excellence in teaching awards, both from students and outside peers, in recognition of his superior teaching skills.”

Reviewer E: “He is an eloquent and engaging speaker who presents information clearly and uses graphics, technology and excellent public speaking skills to transfer knowledge.”

Summary of Recommendation:

Dr. Saint has gained national and international recognition and acclaim in the areas of teaching, research, patient care, and administration. We are indeed fortunate to have faculty of Dr. Saint’s caliber committed to the critical missions of the University of Michigan and our affiliated VA Health System. He has already contributed greatly in our mission to enhance the safety of patients and improve the quality of care we provide. Additionally, he has contributed substantially to our educational program for both medical students and house staff. Finally, his research productivity to date places him among a very small group of the most talented clinical researchers in the country. Thus, we enthusiastically recommend Dr. Sanjay Saint for promotion to Professor, with tenure, in the Department of Internal Medicine.



Allen S. Lichter, M.D., Dean
*Newman Family Professor
of Radiation Oncology*

May 2006