PROMOTION RECOMMENDATION UNIVERSITY OF MICHIGAN MEDICAL SCHOOL DEPARTMENT OF INTERNAL MEDICINE

Approved by the Regents May 20, 2010

<u>Robert J. Fontana, M.D.</u>, 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.D.	1988	University of Michigan
B.S.	1984	Wayne State University

Professional Record:

2004-present	Associate Professor of Internal Medicine, University of Michigan
1998-2004	Assistant Professor of Internal Medicine, University of Michigan
1995-1998	Lecturer, Department of Internal Medicine, University of Michigan
1992-1995	Gastroenterology Fellow, University of Michigan
1991-1992	Clinical Instructor of Internal Medicine, Northwestern University

Summary of Evaluation:

<u>Teaching</u>: Teaching is a major component of Dr. Fontana's responsibilities. His activities consist of small group discussions with second-year students; inpatient ward teaching to students, residents and fellows; and teaching and supervision in the outpatient clinic and endoscopy. Additionally, he mentors fellows and provides teachings in core lectures to first-year fellows, journal club, liver pathology and case review conferences. He is a compassionate teacher who takes his responsibilities seriously and frequently uses a hands-on approach to demonstrate how to manage difficult groups of patients with severe and complicated organ failures. His evaluations by both fellows and students have always been in the top 10% of internal medicine faculty, making him one of the most sought-after liver attendings to work with. He involves students in the care of their patients and offers key points to further focus their management of patients. Dr. Fontana created the weekly radiology conference, which allows the rounding team to review cases with staff radiologists. He is a participant in departmental morning reports, clinical pathology conferences and noon lecture series.

Outside of the institution, Dr. Fontana is a highly sought after speaker and educator. He cofounded and directs the annual Liver Update CME course, which is attended by approximately 150 participants yearly. Dr. Fontana also initiated a new CME course, "Liver Transplantation and Advanced Liver Diseases" which provides case presentations as well as didactic lectures and expert overviews to a large group of participants. His lectures are always lucid, rational and practical to the participants. Over the years, this course has become one of the most attended courses in the State of Michigan. On a national and international level, Dr. Fontana has been invited to speak at many scientific meetings, including those for the American Gastroenterological Association, the American College of Gastroenterology, the American Transplant Congress, and the American Association of the Study of Liver Diseases. He has presented at the International Symposium on Viral Hepatitis, the International Liver Transplant Society, the European Association for the Study of Liver Diseases, and Medical Grand Rounds in Singapore.

Dr. Fontana has also authored guidelines which were the platforms to the development of a fellowship curriculum and national recommendations for management of acute liver failure.

<u>Research</u>: Dr. Fontana's research efforts are clinically based and he continues to be a prolific clinical investigator. Currently he is principal investigator of a U01 grant and a site PI of four additional NIH supported clinical studies. He is the principal investigator for the NIH study "A multi-center therapy trial for acute liver failure" and is consistently the leading enroller among the participating sites. Dr. Fontana was funded to conduct two ancillary studies in the HALT-C Trial and as a result has authored more than ten papers related to the studies.

Dr. Fontana was selected to be a site investigator for the Drug Induced Liver Injury Network (DILIN), which is funded by the NIH. The purpose of the study is to improve the understanding of risk factors, natural history and biological sources for drug induced liver injury (DILI). The DILIN Retrospective study set out to identify DILI patients by means of querying diagnostic codes from billing and administrative databases. A novel technique was used which searched for drug names of interest and cross searched with ICD-9-CM codes used for liver injury. From a large database of almost 7,400 patient records, only 51 DILI cases were identified, which indicates that less than 1% of records coded were attributed to DILI. This is significant in that it demonstrates the lack of consistent and specific codes used for DILI and as such, may impact the methodologies in future DILI research.

Because of Dr. Fontana's experience with clinical design and research, he was selected to lead the DILIN Prospective study, which aims to identify patients with true drug induced liver injury and will allow for collection of epidemiological information and biological samples that will be used for future studies such as whole genome association studies. Dr. Fontana's leadership and contributions from the study has resulted in the organization of the 2008 International Workshop on Methodologies and Terminology in DILI. The design, concepts and definitions put forth by the DILIN Prospective study have emerged as research standards in this field. Dr. Fontana is a leading enroller in the study and has enrolled over 600 patients since 2003.

Recent and Significant Publications:

Fontana RJ, Kleiner D, Bilonick R, Terrault N, Afdhal N, et al: Modeling hepatic fibrosis in African American and Caucasian American patients with chronic Hepatitis C virus infection. *Hepatology* 44:925-935, 2006.

Fontana RJ, Bieliauskas LA, Lindsay KL, Back-Madruga C, Wright EC, Snow KK, Lok ASF, Kronfol Z, Padmanabhan L: Cognitive function does not worsen during peginterferon and ribavirin treatment of chronic Hepatitis C. *Hepatology* 45:1154-1163, 2007.

Jinjuvadia K, Kwan W, Fontana RJ: Searching for a needle in a haystack: Use of ICD-9-CM codes in drug induced liver injury. *Am J Gastroenterol* 102:1-7, 2007.

Fontana RJ, Watkins PB, Bonkovsky HL, Chalasani N, Davern T, Serrano J, Rochon J for the DILIN study Group: Rationale, design and conduct of the Drug Induced Liver Injury Network Prospective study. *Drug Safety* 32:55-68, 2009.

Fontana RJ, Bonkovsky HL, Naishadham D, Dienstag JL, Sterling RK, Lok ASF, Su GL and the HALT-C Trial Group: Serum fibrosis maker levels decrease after successful antiviral treatment in chronic hepatitis C patients with advanced fibrosis. *Clin Gastro & Hepatology* 7:219-226, 2009.

<u>Service</u>: Dr. Fontana has served as the medical director of liver transplantation since 2003. In the past six years, he has closely worked with medical staff, nurses, and faculty in hepatology and surgery. In this role, he has guided the program through challenges which include audits and credentialing from UNOS, Medicare and 3rd-party payers. He has worked to recruit new faculty and expand the clinical services offered by the program. Since 2007, Dr. Fontana has served as the director of the transplant hepatology fellowship training program and helped to develop the curriculum and successfully acquired accreditation for the program. There are currently two fellows in this program and he has already confirmed two candidates for the upcoming academic year. Dr. Fontana has also served on a national level. He has been a member of numerous committees, including the organizing committee for the NIH Workshop on drug-induced liver disease and executive committee of the U.S. acute liver failure study group. He has participated in NIH study sections, served as ad hoc and abstract reviewer, refereed numerous journals, and is a member of the editorial boards for *Liver Transplantation* and *Hepatology*.

Dr. Fontana's patient care responsibilities include: hepatology clinic one-half day per week, transplant clinic one-half day per week, endoscopy one-half day per week, staffing fellows clinic one-half day every six weeks, and staffing first-year fellows endoscopy one day every month. In recognition of his clinical skills, Dr. Fontana has been selected in <u>America's Top Physicians</u> and *Hour* Detroit Magazine Top Doctors.

External Review:

<u>Reviewer A</u>: "Dr. Fontana is clearly as productive or more productive than others who are at the rank of Professor of Internal Medicine at medical schools throughout the country."

<u>Reviewer B</u>: "He is considered among the leading experts in the assessment of non-invasive markers of fibrosis using serum marker panels, and his publications are highly cited and rigorous...He is deeply respected among his peers and I have only heard unanimous praise by all who interact with him."

<u>Reviewer C</u>: "...Dr. Fontana is widely recognized as one of the eminent clinical and transplant hepatologists in our country."

<u>Reviewer D</u>: "...Dr. Fontana's career history, as well as his career trajectory, makes him an excellent candidate for promotion to Professor. He clearly models the attributes of a successful

academician with his significant research accomplishments, and demonstrates clinical excellence in both his day-to-day patient care and his pursuit of innovative applications of medical techniques to improve patient care."

<u>Reviewer E</u>: "Dr. Fontana has emerged as a major 'player' in the field of hepatology and particularly in the arena of acute liver failure. He has been a critical partner in several major NIDDK funded networks and has published seminal papers utilizing data accumulated in these large multicenter trials."

Summary of Recommendation:

Dr. Fontana is a productive and successful clinical investigator. He has contributed greatly to the management of patients with viral hepatitis, acute liver failure and drug hepatotoxicity. He is an excellent teacher and a proven leader as demonstrated by the growth of the liver transplantation program since 2003 and the creation of the fourth-year transplant hepatology fellowship program. I am pleased to recommend Dr. Fontana for promotion to professor in the Department of Internal Medicine.

James Ø. Woolliscroft, M.D. Dean Lyle C. Roll Professor of Medicine

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