

PROMOTION RECOMMENDATION  
UNIVERSITY OF MICHIGAN  
MEDICAL SCHOOL  
DEPARTMENT OF INTERNAL MEDICINE

Approved by the Regents  
May 14, 2009

Hakan Oral, M.D., 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.	1990	Hacettepe University, Ankara, Turkey
B.S.	1984	College of Science, Ankara, Turkey

Professional Record:

2005-present	Associate Professor of Internal Medicine, University of Michigan
2000-2005	Assistant Professor of Internal Medicine, University of Michigan

Summary of Evaluation:

Teaching: A great deal of Dr. Oral's teaching effort involves the mentoring of advanced trainees, including the review and assessment of patients with complex arrhythmias with the trainees, as well as the analysis and interpretation of complex electrograms, intracardiac recordings and implantable devices with the trainees. Dr. Oral developed the Core Curriculum for Clinical Cardiac Electrophysiology Fellows in 2003 and is currently in the process of integrating basic and translational electrophysiology into the curriculum to a greater degree. Additionally, Dr. Oral spends several hours daily in the electrophysiologic procedure laboratory teaching the fellows how to perform a number of procedures which range from device implantation to complex ablation procedures. Dr. Oral's real passion is apparent when he mentors the clinical and research fellows in cardiac electrophysiology and trainees from other institutions. In recent years, Dr. Oral has mentored over 15 residents, fellows and advanced trainees from all over the world. He has also served on thesis committees for doctoral candidates in the Department of Biomedical Engineering. Dr. Oral is frequently asked to present at conferences, locally, nationally and internationally with over 40 presentations accounted for on his *curriculum vitae*.

Research: Dr. Oral is an outstanding clinical investigator. His impressive *curriculum vitae* includes a list of six patents and eight patent applications, 142 peer-reviewed publications of which 42 have been published since his last promotion. He has authored or coauthored in 158 abstract presentations at the American Heart Association Scientific Sessions. In 2003, Dr. Oral became the first director of Arrhythmia Research. He established a structured arrhythmia research core including a centralized electronic database. Most exciting is the initiation of a

major collaborative effort between the basic and clinical electrophysiology groups at the University of Michigan, which has been spearheaded by Dr. Oral. Dr. Oral has been highly innovative, developing novel technologies and treatment strategies which have resulted in multiple patents and start-up ventures in which the University of Michigan is a stakeholder. In recognition of Dr. Oral's commitment to arrhythmia research, he was named the first Frederick G.L. Huetwell Endowed Research Professor within the Department of Internal Medicine in 2008.

Recent and Significant Publications:

Yoshida K, Chugh A, Ulfarsson M, Good E, Huhne M, Crawford T, Sarrazin JF, Chalfoun N, Wells D, Boonyapisit W, Veerareddy S, Billakanty S, Wong WS, Jongnarangsin K, Pelosi F, Bogun F, Morady F, Oral H: Relationship between the spectral characteristics of atrial fibrillation and atrial tachycardias that occur after catheter ablation of atrial fibrillation. *Heart Rhythm* (in press).

Yoshida K, Ulfarsson M, Tada H, Chugh A, Good E, Kuhne M, Crawford T, Sarrazin JF, Chalfoun N, Wells D, Jongnarangsin K, Pelosi F, Bogun F, Morady F, Oral H: Complex electrograms within the coronary sinus: time- and frequency-domain characteristics, effects of antral pulmonary vein isolation and relationship to clinical outcome in patients with paroxysmal and persistent atrial fibrillation. *J Cardiovasc Electrophysiol* 19:1017-1023, 2008.

Oral H, Chugh A, Good E, Wimmer A, Dey S, Gadeela N, Sankaran S, Crawford T, Sarrazin JF, Kuhne M, Chalfoun N, Wells D, Frederick M, Fortino J, Benloucif-Moore S, Jongnarangsin K, Pelosi F Jr, Bogun F, Morady F. Radiofrequency catheter ablation of chronic atrial fibrillation guided by complex electrograms. *Circulation* 115(20):2606-12, 2007.

Lemola K, Ting M, Gupta P, Anker JN, Chugh A, Good E, Reich S, Tschopp D, Igic P, Elmouchi D, Jongnarangsin K, Bogun F, Pelosi F, Morady F, Oral H: Effects of two different catheter ablation techniques on spectral characteristics of atrial fibrillation. *J Am Coll Cardiol* 48(2):340-8, 2006.

Oral H, Pappone C, Chugh A, Good E, Bogun F, Pelosi F, Bates E, Lehmann M, Vicedomini G, Augello G, Agricola E, Sala S, Santinelli V, Morady F: Circumferential pulmonary vein ablation for chronic atrial fibrillation: A randomized, controlled study. *N Engl J Med* 354(9): 934-41, 2006.

Service: Dr. Oral is nationally and internationally recognized for his expertise in catheter ablation of complex cardiac arrhythmias, particularly atrial fibrillation. Today, ablation procedures for atrial fibrillation constitute greater than 75% of all ablation procedures (~1000/year) at the University of Michigan. He serves on the editorial boards of many prominent cardiology and electrophysiology journals and is a highly sought-after reviewer. Dr. Oral is an

active member of the Cardiovascular Medicine Administrative Leadership Group, the CVC Culture Committee, the Cardiac Procedures Unit Committee and the CVC Clinical Operations Committee at the University of Michigan.

External Review:

Reviewer A: “He has been at the forefront of innovative approaches to the evaluation and treatment of atrial fibrillation and flutter...in the relatively small world of academic clinical cardiac electrophysiologists, Dr. Oral ranks in the upper 5%...Dr. Oral has made an unusual effort to attract and train a number of international medical graduates who will disseminate his advances to Europe and the Pacific Rim.”

Reviewer B: “Dr. Oral is a highly regarded cardiac electrophysiologist...He has made many important discoveries...His works on atrial fibrillation have been an important source of information for physicians practicing radiofrequency catheter ablation of this arrhythmia....There is no doubt that Dr. Oral is a major leader in clinical cardiac electrophysiology.”

Reviewer C: “It can be said, without a doubt, that in the field of academic electrophysiology, internationally there are about two or three superstars, and Dr. Oral is certainly one of those superstars....I believe Dr. Hakan Oral to be a spectacular, world-class clinical electrophysiologist who has made major and important contributions to the field of cardiac electrophysiology and catheter ablation, and I believe him to be a leader and a truly amazing individual who is capable of taking the cardiac electrophysiology group at the University of Michigan to yet another level.”

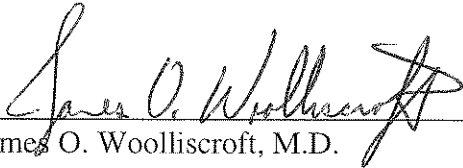
Reviewer D: “Dr. Oral’s expertise has been recognized in multiple venues, including invitations to speak at national meetings, service on Editorial boards of a number of cardiovascular journals, as well as authorship of book chapters and reviews....He has a long history of productivity as a clinician-investigator and he has garnered external support for his work.”

Reviewer E: “Dr. Hakan Oral is held in high esteem by his colleagues around the world, and this is evident by the national and international recognition he has received from them. He has been asked numerous times to serve as a visiting professor and is invited faculty in prestigious national and international meetings.”

Reviewer F: “Dr. Oral is a leader in clinical cardiac electrophysiology and is highly regarded throughout the world. His extensive body of work defining methods for catheter ablation of atrial fibrillation and related arrhythmias is published in top cardiology journals...”

Summary of Recommendation:

Dr. Oral's intellect, skills, and leadership make him the strongest of candidates for consideration for promotion as professor, with tenure. His expertise in the field of clinical cardiac electrophysiology, as well as his contributions to the school and to academia at large are recognized nationally and internationally. He is a sought-after star and we are lucky to have him on faculty. I am pleased to recommend Hakan Oral for promotion to professor, with tenure, in the Department of Internal Medicine.



---

James O. Woolliscroft, M.D.

Dean

*Lyle C. Roll Professor of Medicine*

May 2009