# PROMOTION RECOMMENDATION THE UNIVERSITY OF MICHIGAN MEDICAL SCHOOL DEPARTMENT OF INTERNAL MEDICINE

<u>Elif A. Oral, 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.S.M.D.University of MichiganIstanbul University, Turkey

## Professional Record:

2011-present Associate Professor of Internal Medicine, University of Michigan Assistant Professor of Internal Medicine, University of Michigan

## Summary of Evaluation:

Teaching: Dr. Oral plays a very active role in teaching multiple levels of learners in both formal and informal settings. Her teaching activities are comprised of research education to undergraduate, graduate, and post-doctoral research fellows in the laboratory setting, and clinical teaching to medical students, residents, and fellows in the clinic and hospital setting. She has taught medical students in their pre-clinical years (M1-M2), has taught M3 students in their medicine ambulatory rotations, and M4 students choosing rotation in the endocrinology clinic or inpatient rotation in endocrinology. Currently, she is on the dissertation committee for a University of Michigan College of Pharmacy graduate student. She has developed educational materials for both patients and health care providers and trainees on bariatric surgery, post-bariatric surgery care, as well as on lipodystrophy syndromes and other rare metabolic diseases. She meets regularly with the dietitians and assists in the development of educational content for patients in the post-bariatric clinic and the newly formed Atypical Diabetes Program. Dr. Oral has provided lectures on Obesity and Weight Bias in Health Care Settings during the Endocrine Sequence; which possibly places Michigan Medicine to be first in dedicating teaching hours to this important topic. Dr. Oral is a true scholar having given many lectures locally, regionally, and at the national level in her area of expertise.

Research: Dr. Oral has achieved a distinguished research career, both nationally and internationally, specializing in the study of lipodystrophy syndromes and related metabolic problems. She has published extensively on the efficacy and safety of leptin treatment in patients with partial lipodystrophy, insulin resistance and nonalcoholic fatty liver disease (NAFLD), and has played an important role in establishing the clinical recommendations for treating lipodystrophy patients. Her novel contributions have advanced the understanding of lipoatrophy and its systemic consequences. Dr. Oral's work has been well funded throughout her career by government and industry sponsored research, research performed with philanthropic funding on clinical program patients, and research studies on which she is co-investigator. In addition, she has submitted grants in which she is the principal investigator (PI) on multiple industry sponsored grants and clinical trials, and has submitted three NIH grants as the PI, as well as a US-FDA grant as a Co-PI. Dr. Oral has 79 peer-reviewed publications in high-impact journals with 32 (19 as first or senior author) since her last promotion,

two book chapters, and 104 abstracts. Dr. Oral's national and international reputation is recognized by her numerous extramural invited presentations including 11 since her last promotion. She has served on two international study sections, and served as a sitting study section member for the Clinical and Integrative Diabetes and Obesity (CIDO) section of the NIDDK, and has reviewed grants for multiple agencies including the National Institutes of Health.

# Recent and Significant Publications:

Fajans SS, Herman WH, Oral EA: Insufficient sensitivity of hemoglobin A1C (A1C) determination in diagnosis or screening of early diabetic states. *Metabolism* 60:86-91, 2011.

Akinci B, Onay H, Demir T, Savas-Erdeve S, Gen R, Simsir IY, Keskin FE, Erturk MS, Uzum AK, Yaylali GF, Ozdemir NK, Atik T, Ozen S, Yurekli BS, Apaydin T, Altay C, Akinci G, Demir L, Comlekci A, Secil M, Oral EA: Clinical presentations, metabolic abnormalities and end-organ complications in patients with familial partial lipodystrophy. *Metabolism* 72:109-119, 2017.

Oral EA, Reilly SM, Meral R, Butz L, Ajluni N, Chenevert T, Korytnaya E, Neidert AH, Hench R, Rus D, Horowitz J, Gomez AV, Zhao P, Lehmann K, Jain M, Yu R, Liddle C, Ahmadian M, Downes M, Evans RM, Saltiel AR: Inhibition of IKK and TBK1 ameliorates insulin resistance and hepatic steatosis in a subset of patients with type 2 diabetes. *Cell Metab* 26:157-170.e7, 2017.

Ajluni NN, Meral R, Neidert AH, Brady GF, Buras E, McKenna B, DiPaola F, Chenevert TL, Buggs-Saxton C, Rupani AR, Thomas PE, Tayeh MK, Innis JW, Bishr Omary M, Conjeevaram H, Oral EA: Spectrum of disease in partial lipodystrophy (PL): Lessons from a trial cohort. *Clinical Endocrinology* February 15, 2017. doi: 10.1111/cen.13311.

Lager CJ, Esfandiari NH, Subauste AR, Kraftson AT, Brown MB, Cassidy RB, Nay CK, Lockwood AL, Varban OA, Oral EA: Roux-en-Y gastric bypass and sleeve gastrectomy: Balancing the risks of surgery with the benefits of weight loss. *Obesity Surgery* 27:154-161, 2017.

Service: Dr. Oral specializes in the care of patients with obesity and metabolic disorders. As a board-certified physician in Endocrinology, Diabetes and Metabolism, Dr. Oral is a respected international leader in her field and sought after by her peers for her expertise in severe insulin resistance syndromes research. Dr. Oral's service contributions are exemplary. At the University of Michigan, she has held key leadership positions as the medical director of the UMHS Bariatric Surgery Program (2005-2014), and now as the director of the Post Bariatric Clinic in the Division of MEND (2011-present). Dr. Oral has had a substantial national and international presence with her service on international and national study sections and site visit committees, and national committees. In addition, she has served on the editorial boards of *Journal of Clinical Endocrinology and Metabolism* (2007-2009), *Clinical Diabetes and Endocrinology* (2015-present), and *Austin Endocrinology and Diabetes Case Reports* (2016-present). She was named to the Top Doctors in America (2009) and Top Physicians in America (2009) and received the Champion of Hope Award (from Global Genes, 2016), as well as many other awards and honors received throughout her career.

## External Reviewers:

Reviewer A: "Dr. Oral is one of only a handful of clinical investigators in the United States who is focusing on the diagnosis and treatment of the lipodystrophies and she has led or been a member of a

number of clinical trials to examine new treatments especially using leptin. Her research has advanced our understanding of the clinical features of various forms of lipodystrophy."

Reviewer B: "...Dr. Oral is clearly one of a handful of people in the world with substantial scholarship and experience in managing lipodystrophies and their associated morbidities. Her recent record of publications is very strong and she has a large number of current research contracts and multiple federal research proposals currently under review."

Reviewer C: "She delivered an outstanding state-of-the-art lecture on rare syndromes of lipodystrophy, combining an historical perspective with their evolution over time and the current management of such complex patients. It truly continued to resonate among attendees long after her visit."

Reviewer D: "She has proven herself to be a physician scientist capable of addressing complex human metabolic disorders through studies that extend from emerging molecular insights to clinical investigation of novel therapies. Her personal strength seems to be as the driver of such complex and often difficult investigations—few have the capacity to succeed in doing this as she has done."

Reviewer E: "Dr. Oral published a landmark paper showing the profound efficacy of leptin for the treatment of lipodystrophy in humans. This study and a series of subsequent publications provided the basis for the approval of leptin as a therapeutic to treat this condition. Her recent study showing a beneficial effect of leptin as a treatment of obesity in patients with low endogenous leptin levels is also highly significant and is the first study to show this (this research is unpublished but Dr. Oral has presented it publicly). She is also highly prolific and her recent clinical study in Cell Metabolism showing a beneficial effect of Inhibition of IKK 3 and TBK1 is especially important."

### Summary of Recommendation:

Dr. Oral is an exceptional physician scientist who is internationally known for her important research on the care and treatment of lipodystrophy syndromes and related metabolic disorders. She provides significant and important clinical leadership in obesity as the director of the Obesity and Metabolic Disorders program, and the Post Bariatric Clinic. Furthermore, Dr. Oral plays important roles in teaching and in her multiple service contributions to the academic community. It is for these reasons that I recommend Elif A. Oral, M.D. for promotion to professor of internal medicine, with tenure, Department of Internal Medicine, Medical School.

Marschall S. Runge, M.D., Ph.D.

Executive Vice President for Medical Affairs

Maruteal S. Runge

Dean, Medical School