

Approved by the
Regents
May 21, 2015

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

Dinesh Khanna, M.B.B.S., 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.	2004	UCLA
M.B.B.S.	1996	University College of Medical Sciences, Dilshad Garden, Delhi, India

Professional Record:

2011-present	Associate Professor of Internal Medicine, University of Michigan
2008-2011	Assistant Professor of Internal Medicine, UCLA
2007-2008	Assistant Clinical Professor of Medicine, UCLA
2004-2007	Assistant Professor of Medicine, Department of Internal Medicine, University of Cincinnati
2003-2004	Clinical Instructor, UCLA

Summary of Evaluation:

Teaching: Dr. Khanna plays a significant role in education at the University of Michigan. He teaches medical students, residents and rheumatology fellows rotating in the outpatient clinic and teaches the fellows on the inpatient/consult service. In his role as director of the UM Scleroderma Program, Dr. Khanna is highly involved in didactic sessions with residents and fellows, and instructs international students and researchers who regularly visit the UM Scleroderma Program to gain insight on scleroderma care and research. For the past two years, Dr. Khanna has also taught the M3 musculoskeletal course for third-year medical students. He also serves as associate director of the UM NIH/NIAMS T32 training grant for the development of outcomes researchers in rheumatology. He is a primary mentor to a vast number of students at all levels from medical students to junior faculty. As a result of his successful mentoring, two of his mentees have decided to pursue academic careers rather than private practice. Several more have received awards such as the American College of Rheumatology Preceptorship Award, NIH career development awards for research, have received their own NIH grants, and are publishing their own original manuscripts. Dr. Khanna's K24 award from the NIH supports his mentoring of clinical research trainees.

Research: Dr. Khanna has a distinguished research career, specializing in systemic sclerosis and gout. He has a strong record of funding, and currently holds one NIH R01 grant as the principal investigator, five NIH grants as a co-investigator, and is the principal investigator on several industry and institutionally awarded grants. He has 206 peer-reviewed publications with a great

number of them as first or senior author in high-impact journals, 16 book chapters as first or senior author, and 176 abstracts. As a testament to his expertise, Dr. Khanna serves as journal reviewer for many national and international journals, serves on numerous study sections, and reviews grants for multiple international agencies including the Dutch Arthritis Association Grant Application, and Raynaud's & Scleroderma Association, United Kingdom.

Recent and Significant Publications:

Khanna D, Fitzgerald JD, Khanna PP, Bae S, Singh MK, Neogi T, Pillinger MH, Merrill J, Lee S, Prakash S, Kaldas M, Gogia M, Perez-Ruiz F, Taylor W, Lioté F, Choi H, Singh JA, Dalbeth N, Kaplan S, Niyyar V, Jones D, Yarows SA, Roessler B, Kerr G, King C, Levy G, Furst DE, Edwards NL, Mandell B, Schumacher HR, Robbins M, Wenger N, Terkeltaub R: 2012 American College of Rheumatology guidelines for management of gout. Part 1: Systematic nonpharmacologic and pharmacologic therapeutic approaches to hyperuricemia. *Arthritis Care Res* (Hoboken) 64:1431-1446, 2012.

Khanna D, Khanna PP, Fitzgerald JD, Singh MK, Bae S, Neogi T, Pillinger MH, Merrill J, Lee S, Prakash S, Kaldas M, Gogia M, Perez-Ruiz F, Taylor W, Lioté F, Choi H, Singh JA, Dalbeth N, Kaplan S, Niyyar V, Jones D, Yarows SA, Roessler B, Kerr G, King C, Levy G, Furst DE, Edwards NL, Mandell B, Schumacher HR, Robbins M, Wenger N, Terkeltaub R: 2012 American College of Rheumatology guidelines for management of gout. Part 2: Therapy and antiinflammatory prophylaxis of acute gouty arthritis. *Arthritis Care Res* (Hoboken) 64:1447-1461, 2012.

van den Hoogen F, Khanna D, Fransen J, Johnson SR, Baron M, Tyndall A, Matucci-Cerinic M, Naden R, Medsger Jr. TA, Carreira P, Riemekasten G, Clements P, Denton CP, Distler O, Allanore Y, Furst DE, Gabrielli A, Mayes M, van Laar JM, Seibold JR, Czirjak L, Steen V, Inanc M, Kowal-Bielecka O, Müller-Ladner U, Valentini G, Veale D, Vonk M, Walker UA, Chung L, Collier D, Csuka ME, Fessler BJ, Guiducci S, Herrick A, Hsu V, Jimenez S, Kahaleh B, Merkel P, Sierakowski S, Silver R, Simms R, Varga J, Pope JE: 2013 classification criteria for systemic sclerosis: An American College of Rheumatology/European League Against Rheumatism Collaborative Initiative. *Ann Rheum Dis* 72:1747-1755, 2013.

Khanna D, Gladue H, Channick R, Chung L, Distler O, Furst DE, Hachulla E, Humbert M, Langleben D, Mathai SC, Saggarr R, Visovatti S, Altorok N, Townsend W, Fitzgerald J, McLaughlin V: Recommendations for screening and detection of connective-tissue disease associated pulmonary arterial hypertension. *Arthritis Rheum* 65:3194-3201, 2013.

Spiegel BM, Hays RD, Bolus R, Melmed GY, Chang L, Whitman C, Khanna PP, Paz SH, Hays T, Reise S, Khanna D: Development of the NIH patient-reported outcomes measurement information system (PROMIS) gastrointestinal symptom scales. *Am J Gastroenterol*. 2014 Sep 9. doi: 10.1038/ajg.2014.237. [Epub ahead of print]

Service: Dr. Khanna's clinical responsibilities are at the UM Hospital where he sees patients with scleroderma and related conditions. He also has important and significant service as the director of the University of Michigan Scleroderma Program. This clinical program sees approximately 1,200 patients each year. In this program, he works closely with the pulmonary hypertension program in cardiology, the interstitial lung disease program in pulmonary medicine, the hand surgery clinic in plastic surgery, and the occupational therapy program in physical medicine and rehabilitation. He uses his unique clinical and research expertise to examine the pathogenesis of scleroderma, and find treatments for this disease in order to better help his patients. In addition to his clinical duties Dr. Khanna serves on the editorial board for the *Clinical and Experimental Rheumatology Scleroderma Supplement* and the journal *Rheumatology* (Oxford). Dr. Khanna currently serves on the Medical Advisory Board for the Michigan Scleroderma Foundation, and is the principal investigator involved in writing guidelines for the screening and diagnosis of connective tissue diseases associated with pulmonary arterial hypertension. Nationally, Dr. Khanna serves as the PI for the Veteran's Affairs CRYSTAL registry, and serves on the Planning Committee for the American College of Rheumatology.

External Reviewers:

Reviewer A: "Dr. Khanna has established himself as an international expert on scleroderma and related conditions. This theme is highlighted in his teaching, research and service activities. Dr. Khanna is also recognized for his expertise related to gout, as reflected in his recent contributions [to] the development of guidelines for the management of this condition."

Reviewer B: "Dr. Khanna has successfully carved out a unique scholarly and professional niche in Scleroderma research and clinical practice, where he's rapidly become an international leader. He is well known and well respected both nationally and internationally."

Reviewer C: "When evaluating the overall impact of his work, I would place Dr. Khanna in the top rank of individuals within his own scientific area, and certainly his work has had substantial impact on the field."

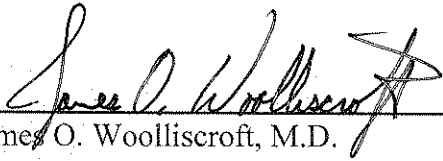
Reviewer D: "Dr. Khanna is a highly productive clinical researcher and educator. He is well known as one of the top scleroderma investigators in the US and has written extensively about the clinical epidemiology of this condition, and has educated many other physicians through invited lectures and conferences."

Reviewer E: "Dr. Khanna is among a very small handful of clinical investigators who have made important contributions to our understanding of scleroderma. Through this work, Dr. Khanna has become widely recognized nationally and internationally as a talented clinical scientist, an outstanding teacher, and an innovative thinker...To his great credit, he has chosen to focus his career on scleroderma, one of the most challenging and devastating diseases in our field...His prominence is further illustrated by his leadership role in the recent development of classification criteria for scleroderma, which was a joint effort of the American and European rheumatology subspecialty societies, and by his leadership role in developing official

recommendations for screening and detection of pulmonary arterial hypertension in the setting of connective tissue diseases.”

Summary of Recommendation:

Dr. Khanna is an exceptional physician scientist who has made important clinical and scholarly contributions through his work on scleroderma, and in teaching and service. In the area of scleroderma clinical research, he is the leading investigator of his generation. His professional activities and scholarly work can be expected to continue to have a significant impact on our institution and on his field of research well into the future. For these reasons, I enthusiastically recommend the promotion of Dinesh Khanna, M.B.B.S. to professor of internal medicine, with tenure, Department of Internal Medicine, Medical School.



James O. Woolliscroft, M.D.

Dean

Lyle C. Roll Professor of Medicine

May 2015