

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

John J. Osterholzer, M.D., assistant professor of internal medicine, Department of Internal Medicine, Medical School, is recommended for promotion to associate professor of internal medicine, with tenure, Department of Internal Medicine, Medical School.

Academic Degrees:

M.D.	1999	University of Michigan
B.S.	1994	University of Michigan

Professional Record:

2010-present	Assistant Professor of Internal Medicine, University of Michigan
2006-2009	Clinical Lecturer, Department of Internal Medicine, University of Michigan

Summary of Evaluation:

Teaching: Dr. Osterholzer's excellence in clinical teaching is reflected in the evaluations submitted by medical students, internal medicine residents, and pulmonary and critical care fellows. He is consistently ranked above the average teaching scores amongst faculty members within his division and department. Dr. Osterholzer's leadership and creativity in teaching is reflected by his increasingly active role in educating trainees on how to effectively discuss goals of care and end of life care with patients in the intensive care unit. He has initiated monthly break-out sessions with internal medicine residents where they can discuss challenging cases they have experienced while caring for patients near death. Dr. Osterholzer also engages in research training. He mentors undergraduate students in the Undergraduate Research Opportunity Program, graduate students in the Graduate Program in Immunology, and post-doctoral fellows supported by an NIH-funded T32 training grant in lung disease. Although Dr. Osterholzer is not graded on his research training efforts, his trainees have been successful and productive and most continue to pursue careers in biomedical research.

Research: Dr. Osterholzer's scholarly persistence is best demonstrated by a series of investigations spanning several years in which he discovered important interrelationships between the lung, blood, and bone marrow in response to fungal lung infection. His work has also elucidated important local and systemic cytokine networks which profoundly influence immune defenses against these infections. His attainment of numerous scientific milestones reflects a steady progression from a trainee on a NIH T32 training grant, to being the recipient of a mentored VA Career Development Award, and most recently, to an independent investigator funded by a VA Merit Review Award. Inspired by the example of the late Dr. Galen Toews, his primary post-doctoral mentor, Dr. Osterholzer broadened his investigative interests and began studying the role of monocytes, dendritic cells (DC), and macrophages in the substantial problem of lung fibrogenesis following epithelial injury. In diversifying his interests, Dr. Osterholzer now collaborates with numerous colleagues, serves as co-investigator on their grants, and contributes to the division's impressive capacity for implementing team science.

Recent and Significant Publications:

Osterholzer JJ, Chen GH, Olszewski MA, Zhang YM, Curtis JL, Huffnagle GV, Toews GB: Chemokine receptor 2-mediated accumulation of fungicidal exudate macrophages in mice that clear cryptococcal lung infection. *Am J Pathol* 178:198-211, 2011.

Osterholzer JJ, Christensen PJ, Lama V, Horowitz JC, Hattori N, Subbotina N, Cunningham A, Lin Y, Murdock BJ, Morey RE, Olszewski MA, Lawrence DA, Simon RH, and Sisson TH: PAI-1 promotes the accumulation of exudate macrophages and worsens pulmonary fibrosis following type II alveolar epithelial cell injury. *J Pathol* 8:170-180, 2012.

Osterholzer JJ, Olszewski MA, Chen GH, Subbotina N, Browning K, Lin Y, Murdock BJ, Morey RE, Simon RH, and Sisson TH: Implicating exudate macrophages and Ly-6C(high) monocytes in CCR2-dependent lung fibrosis following gene-targeted alveolar injury. *J Immunol* 190:3447-3457, 2013.

Murdock BJ, Teitz-Tennenbaum S, Chen GH, Dils AJ, Malachowski AN, Curtis JL, Olszewski MA, Osterholzer JJ: Early or late IL-10 blockade enhances Th1 and Th17 effector responses and promotes fungal clearance in mice with cryptococcal lung infection. *J Immunol* 193:4107-4116, 2014.

Murdock BJ, Huffnagle GB, Olszewski MA, Osterholzer JJ: Interleukin-17A enhances host defense against cryptococcal lung infection through effects mediated by leukocyte recruitment, activation, and gamma interferon production. *Infect Immun* 82:937-948, 2014.

Service: Dr. Osterholzer believes that the collective efforts of numerous individuals are essential to the success of any organization. At the local level, his service to the University of Michigan and the Ann Arbor VA Hospital is evidenced by his contribution to five separate Research Advisory Committees (two as chair) for T32 trainees, the Pulmonary and Critical Care Fellowship Evaluation Committee, the Dissertation Committee for Brian Zammaron, and the Department of Internal Medicine Program Application Review Committee. In the past, he has served on the Graduate Program in Immunology Preliminary Exam Committee and the Ann Arbor VA Hospital Critical Care Operating Committee. Dr. Osterholzer serves as a mentor for the Undergraduate Research Opportunity Program and has fostered the research career of two students in this capacity. On the national level, he holds membership in the American Association of Immunologists, the American Thoracic Society, and the American Society of Microbiologists. Dr. Osterholzer has served on numerous committees for the American Thoracic Society including the Members in Transition Committee and the Program Committee for the Allergy, Immunology, and Inflammation Assembly. Dr. Osterholzer serves as an ad hoc reviewer for six research journals and, as a member of the NIH Early Career Review Program, he was selected to review grant proposals submitted to the study section on AIDS, Opportunistic Infections, and Cancer. Dr. Osterholzer has a strong commitment to patient care as a Pulmonary and Critical Care physician at the Ann Arbor VA Health System. At the VA, he serves on the Medical Intensive Care Unit and Inpatient Pulmonary Consult Service, the New Patient Consultation Clinic, Continuity Clinic, and the Bronchoscopy and Related Pulmonary Procedures Service. His advanced training and expertise in endobronchial ultrasound and his weekly participation in the Multidisciplinary Thoracic Conference helps to meet the commitment to the early identification and treatment of lung cancer. Dr. Osterholzer works well in multidisciplinary teams and is well-respected by his peers, physician assistants, and nurse practitioners from numerous disciplines throughout the health system.

External Reviewers:

Reviewer A: “Dr. Osterholzer has made a number of important contributions regarding the role of myeloid cells in lung host defenses to *Cryptococcus* and lung damage. His work has broadened our understanding of the key role of these cells in innate immunity and in directing adaptive immunity.”

Reviewer B: “Dr. Osterholzer developed laboratory-based programs focused on lung inflammation and antifungal host defense. These findings are not only important for clinical diagnosis but also important for the development of improved treatment and/or prevention strategies. He has published numerous seminal articles in these fields.”

Reviewer C: “Dr. Osterholzer has made some seminal contributions to our knowledge of cryptococcal immunology. This body of work includes elegant observations regarding virulence, leukocyte recruitment to the lung and cytokine networks....John is a rising star in the field of pulmonary medicine; it is easy to predict that he will continue to make outstanding contributions for many decades to come.”

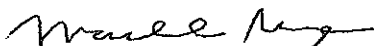
Reviewer D: “Dr. Osterholzer’s record of funding is excellent, and again demonstrates success in creating a unique research program, along with participating in a collaborative, multidisciplinary environment.”

Reviewer E: “Dr. Osterholzer has emerged as an outstanding, independently funded, productive, interactive, and integral member of the academic pulmonary and critical care community. He has demonstrated to his peers that he is a leader in the area of lung defense infection and fibrosis.”

Reviewer F: “John is an expert in the area of pulmonary and microbial immunology. More specifically, he is widely known for his work investigating the factors involved in the recruitment of dendritic cells to the lung.”

Summary of Recommendation:

Dr. Osterholzer is an outstanding immunologist, dedicated teacher and mentor, and a compassionate clinician. His excellent productivity, funding, national reputation, educational contributions, and service provide strong support for his promotion. I am pleased, therefore, to recommend John J. Osterholzer, M.D. for promotion to associate 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
Dean, Medical School

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