

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

Michal A. Olszewski, D.V.M., Ph.D., associate professor of internal medicine, with tenure, Department of Internal Medicine, Medical School, is recommended for promotion to professor of internal medicine, Department of Internal Medicine, Medical School.

Academic Degrees:

Ph.D.	1997	Michigan State University, Department of Large Animal Clinical Sciences, College of Veterinary Medicine
D.V.M.	1988	Warsaw University of Life Sciences (SGGW), College of Veterinary Medicine, Warsaw, Poland

Professional Record:

2015-present	Associate Professor of Internal Medicine, University of Michigan
2011-2015	Assistant Professor of Internal Medicine, University of Michigan
2007-2010	Research Assistant Professor of Internal Medicine, University of Michigan
2003-2007	Research Investigator of Internal Medicine, University of Michigan

Summary of Evaluation:

Teaching: Dr. Olszewski has a unique niche for teaching. He has served as the primary mentor for over 40 fellows and Ph.D. students, many who were associated with the Graduate Program in Immunology and several undergraduate students in the Microbiology major. In the classroom setting, he has been teaching the Immunology 850 course, Methods in Immunology, since 2011 and has continued to revamp and reorganize the program, encouraging students to take responsibility for their own learning. The credits for this class increased from two to three, and was rated as exceptional by the on-site NIH review of the Immunology Program. Dr. Olszewski also teaches in UROP, CHM399, CHM499, MICROB399, CMB399, CMB499 and INTMED399. Students spend 10-12 hours per week in his laboratory where he provides small group teaching and 1:1 interaction. In this setting, he teaches the theory and application of common tools and approaches used in immunology. His laboratory provides a unique learning experience for students and fellows as it contains a special 10X Genomics system and genomic sequence analysis program. Dr. Olszewski has served on Ph.D. thesis committees and as an external examiner on thesis defenses of students training at outside institutions, and an evaluator for graduate student seminars of the Immunology Graduate Program IMM 815.

Research: Dr. Olszewski's research focuses on fungal infections in the lung, with a special interest in *Cryptococcus neoformans*. *Cryptococcus neoformans* is a leading cause of mortality due to central nervous system (CNS) infection worldwide. His laboratory's main focus is to identify mechanisms and pathways within the pathogen to develop therapeutic targets and antifungal drugs. His research provided a major contribution to understanding the role of several virulence factors in pathogenesis of cryptococcal infections. The results of these studies are widely known and have been cited in over 200 different peer reviewed articles. Dr. Olszewski's follow up article which

dissects the role of immune response in mediating damage in a cryptococcus-infected brain was cited 24 times within 20 months of publication. His latest work has uncovered a new understanding of how the disease differs in HIV-infected individuals as compared to that in non-HIV subjects. Through this research, he has developed a model system that provides others with the tools to study the immunology of CNS fungal infection. His lab has also determined the importance of MARCO, a scavenger receptor, in antifungal immunity in the lung. This finding has launched a new and exciting investigative pathway, bringing us one step closer to closing the gap on the mortality rate of these infections. Dr. Olszewski has been successful in obtaining independent and continuous grant funding to support his research. He is principal investigator of a Veterans Affairs Merit grant and co-investigator of a Veterans Affairs Biomedical Laboratory Research and Development grant, and has recently received a very prestigious Veterans Affairs Research Career Scientist Award. Dr. Olszewski has published more than 70 peer-reviewed articles and has been invited to present his research on 21 occasions; eight at international venues.

Recent and Significant Publications:

Neal LM, Xu J, Xing E, Kolbe J, Osterholzer JJ, Segal BM, Williamson PR, Olszewski MA: CD4 T cells orchestrate lethal immune pathology despite fungal clearance during *Cryptococcus neoformans* meningoencephalitis. *MBio*. Nov 21;8(6) 2017.

Xu J, Flaczyk A, Neal LM, Fa Z, Eastman AJ, Malachowski AN, Cheng D, Moore BB, Curtis JL, Osterholzer JJ, Olszewski MA. Scavenger Receptor MARCO Orchestrates Early Defenses and Contributes to Fungal Containment during Cryptococcal Infection. *J Immunol*; 198:3548-3557, 2017.

Xu J, Eastman AJ, Flaczyk A, Neal LM, Zhao G, Carolan J, Malachowski AN, Yosri M, Chensue S, Curtis JL, Osterholzer JJ, Olszewski MA. Disruption of early TNF- α signaling prevents classical activation of dendritic cells in lung-associated lymph nodes and the development of protective immunity against cryptococcal infection. *MBio*. Jul 12;7(4) 2016.

Eastman AJ, He X, Qiu, Y, Davis MJ, Vedula P, Lyons DM, Park Y-D; Hardison SE; Malachowski A; Wormley FL; Williamson PR, Olszewski MA: Cryptococcal heat shock protein 70 homolog Ssa1 contributes to pulmonary expansion of *C. neoformans* during the afferent phase of the immune response by promoting macrophage M2 polarization. *J. Immunol* 194: 5999-6010, 2015.

Davis MJ, Eastman AJ, Qiu Y, Gregorka B, Curtis JL, Osterholzer JJ, Swanson J, Olszewski MA: Macrophage lysosome damage is a crucial component of virulence for the fungal pathogen. *J. Immunol*; 194: 2219-31, 2015.

Service: Dr. Olszewski's unique background and training in veterinary medicine affords some exclusive opportunities for leadership and service. At the Ann Arbor Veterans Affairs Health System, he serves as the special advisor for the IACUC Management to the V.A. Chief Veterinary Medical Officer. He has served as a member on the animal studies committee since 2002, and became the chair of the committee in 2006. In this role, Dr. Olszewski participates in the inspection and review of the animal research program, authorizes the utilization of animals and presides over the monthly IACUC meetings. He is the V.A. supervisor for the Live Cell Imagine Analysis Core and the Experimental Tobacco Smoke Exposure Core. At the University of Michigan, Dr. Olszewski serves as a reviewer for the New Initiatives Program and the

Undergraduate Research Opportunity Program's Summer Biomedical Fellowship program and as a committee member of the Graduate Student Affairs Committee Program in Immunology. He actively participates in the T32 interdisciplinary training program for Pulmonary Division and mentors several trainees in immunology related research. He is an active participant on several editorial boards including as a section editor of the *Journal of Immunology*, he was formerly an associate editor, the *International Journal of Clinical and Experimental Immunology* and as an academic editor of *PLOSOne*. He serves as a grant reviewer for Medical Research Council in the United Kingdom, for the microbiology study section of the American Heart Association and as a reviewer for over 15 scientific journals. As a member of the program committee for American Thoracic Society, he has developed topics for the research symposia's national conference, reviewed and selected abstracts, and has served as a facilitator on poster sessions. He is extensively involved in the planning committee for the International Conference of Cryptococcus and Cryptococcosis being held in Uganda in 2020.

External Reviewers:

Reviewer A: "I was always impressed with the quality of his work and I am convinced without any reservation that he has become one of the top scientists today in fungal immunology. In fact, I rate him as the most important scientists of his generation working on immunology of fungal disease in the United States and can attest that in the past 15 years, his work has completely changed our understanding of the immune response in the lung and has far reaching implications to understanding host defenses. He has a strong footprint at international meetings with many award-winning presentations...Michal is well-known in our scientific community as a great collaborator and partner in science and is frequently being invited to either participate in various collaborate project [sic] or simply asked for advise...I expect Michal to continue being the major player in our field of studies..."

Reviewer B: "I respected his published work quite a bit and when I assumed the editors position in 2009, he was one of the first that I brought into the fold of reviewers. My lab uses his findings to help us sort out nettlesome problems...We review his work to help us sort out roadblocks. The influence of his work remains vital to the field. He also places high value on mentoring as he has mentored a number of undergraduates as well as doctoral and postdoctoral trainees. This is time-consuming but is highly rewarding when those individuals mature during their time in the lab. Michal certainly would qualify for promotion at our own institution."

Reviewer C: "There are only a few researchers with this expertise in the world, and he is clearly respected among them. He is a dedicated mentor, as evidence by his award for outstanding mentorship and by the excellent performance of his trainees at conferences; he has been particularly strong as an undergraduate research mentor. Finally, he has been steadily productive in his publications, with almost 30% of his data papers, including some important discoveries when he is senior author, published in the five years since his previous promotion."

Reviewer D: "I was impressed by the work and the presentation. I followed his publications since then and was never disappointed. Michal Olszewski has become in a few years an outstanding scientist who brings new tools, new approaches. He has also collaborated with many internationally recognized teams showing how his peers appreciate his work...He has more than 2524 citations (2161 without self-citation), with an H-index of 31."

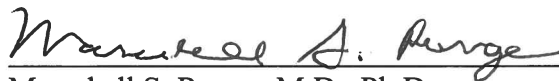
Reviewer E: “He has maintained a strong and consistent funding record, both via VA Merit awards and Training grants. He has clearly matured to a successful senior investigator. His invited speaker engagements are clear evidence of his achievement of an international reputation in the field. Hence, his service continues to be outstanding with clear evidence of his senior status. There is no question he would receive this promotion at my institution.”

Reviewer F: “His work consistently receives spotlights by the publishing journal, attesting to the importance of his work. He has also presented major talks at important scientific meetings, notably a major talk at the 2019 Gordon Research Conference on Fungal Immunology, which I chaired. I can attest that he is an engaging and enthusiastic speaker. His career is at a very productive stage, and I predict that his productivity will accelerate even more in coming years.”

Reviewer G: “Thus, I found his review article published in the Future Microbiology in 2010 to be an eye-opening paperwork which motivated our laboratory to divert 50 percent of the resource to study the host response against Cryptococci. He will be responsible for planning the immunology sessions of the conference, a task given only to the recognized leaders in the field. There are several scholarly publications of Dr. Olszewski’s which I think are outstanding. In summary, Dr. Olszewski more than fulfils [sic] all the criteria expected for full professor...”

Summary of Recommendations:

Dr. Olszewski is a superb immunologist who has made an impact on the training of researchers. He has broadened the understanding of fungal and bacterial infections through his robust team science collaborations. I am pleased, therefore, to recommend Michal A. Olszewski, D.V.M., Ph.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,
Dean, Medical School

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