## PROMOTION RECOMMENDATION UNIVERSITY OF MICHIGAN MEDICAL SCHOOL

# DEPARTMENT OF PEDIATRICS AND COMMUNICABLE DISEASES DEPARTMENT OF MICROBIOLOGY AND IMMUNOLOGY

Jason B. Weinberg, M.D., assistant professor of pediatrics and communicable diseases, Department of Pediatrics and Communicable Diseases, and assistant professor of microbiology and immunology, Department of Microbiology and Immunology, Medical School, is recommended for promotion to associate professor of pediatrics and communicable diseases, with tenure, Department of Pediatrics and Communicable Diseases, and associate professor of microbiology and immunology, without tenure, Department of Microbiology and Immunology, Medical School.

## Academic Degrees:

M.D. 1996 Duke University A.B. 1992 Princeton University

#### Professional Record:

2006-present Assistant Professor of Pediatrics and Communicable Diseases, and

Assistant Professor of Microbiology and Immunology, University

of Michigan

2003-2006 Clinical Lecturer, Department of Pediatrics and Communicable

Diseases, University of Michigan

#### Summary of Evaluation:

Teaching: Dr. Weinberg is very active in the education of trainees of multiple levels at the University of Michigan. His evaluations from all of his teaching activities are consistently outstanding, and he has twice been recognized as a Top Resident Teacher in the Department of Pediatrics. Dr. Weinberg's most important recent educational contributions focus on the Pediatric Infectious Diseases Fellowship Program, which he has directed since 2011. Since assuming the role of program director, he has successfully updated the program's curriculum. changing the format of key teaching conferences and adding new conferences and elective rotations that enhance the fellows' training experiences. In addition, Dr. Weinberg supervises and teaches pediatric infectious diseases fellows on the pediatric infectious diseases inpatient consult service and in the pediatric infectious diseases and immunology outpatient clinic. teaching clinical medicine relevant to the management of children with infectious diseases and primary immunodeficiencies. His contributions to clinical education also include teaching clinical medicine at the bedside to third-year medical students when they rotate through the pediatric infectious diseases and immunology outpatient clinic, as well as supervising and teaching fourth-year students and pediatric residents during their elective rotation in pediatric infectious diseases. Dr. Weinberg also engages in didactic teaching, serving as a small group instructor in the M1 Infectious Diseases and Microbiology Sequence, giving formal talks to

pediatric residents as part of their core lecture series and to other divisions in the Department of Pediatrics. He has given grand rounds for several departments at the University of Michigan that were very well received. Dr. Weinberg provides laboratory-based basic science teaching for medical students, undergraduate students, and graduate students that rotate through his laboratory. He has mentored the extended research training of a pediatric infectious diseases fellow and a master's student in the School of Public Health, and he supervises a graduate student in the Department of Microbiology and Immunology who is performing her thesis research in his laboratory. Dr. Weinberg contributes to the education of many other trainees by serving on graduate student dissertation committees, post-doctoral research committees, and scholarship advisory committees for fellows in pediatric infectious diseases and other subspecialties. Dr. Weinberg's trainees have gone on to successful positions in graduate schools, professional schools, and clinical settings.

Research: Dr. Weinberg's basic science research fills a unique and important niche in the fields of pediatric infectious diseases and virology. Research in his laboratory is focused on understanding interactions between adenoviruses and host immune responses. established a novel mouse model of adenovirus infection that uses a mouse pathogen, mouse adenovirus type 1, to study the pathogenesis of an adenovirus in its natural host. Using this model, he has made significant contributions to the understanding of key host responses to adenovirus respiratory infection. Current work in his laboratory seeks to characterize the effects of eicosanoids on adenovirus pathogenesis in immunocompetent and immunocompromised hosts, while other ongoing projects are designed to define short- and long-term effects of respiratory viral infection during infancy and to study host factors that contribute to adenovirus myocarditis. All of these projects stem from important clinical questions, and Dr. Weinberg's long-term goal is to identify novel virus- and host-specific targets to exploit for the treatment of adenovirus-associated disease. Dr. Weinberg has successfully competed for funding from institutional sources and from the NIH. Progress in his laboratory has led to multiple manuscripts, and he has been invited to speak about his research at local, national, and international meetings. Dr. Weinberg's research has been acknowledged in the past by his receiving the Department of Pediatrics Fellow Award for Basic Science, a Pediatric Infectious Diseases Research Fellowship, a Department of Pediatrics Janette Ferrantino Award, and a Child Health Research Center Junior Investigator Award. As an additional honor, he was elected to the Society of Pediatric Research. As a reflection of Dr. Weinberg's recognition within his field, he serves as a manuscript reviewer for 11 journals in the fields of virology, immunology, infectious diseases, and pediatrics. He also serves as a section editor for Infectious Disease Reports. He sits on grant review committees for the annual University of Michigan Pediatric Intramural Awards, and he has served as a reviewer for the University Michigan MICHR Pilot Grant Program.

### Recent and Significant Publications:

Weinberg JB, Jensen DR, Gralinski LE, Lake AR, Stempfle GS, Spindler KR: Contributions of E1A to mouse adenovirus type 1 pathogenesis following intranasal inoculation. *Virology* 357:54-67, 2007.

Nguyen Y, Anderson VE, McGuffie BA, Weinberg JB: Gammaherpesvirus modulation of mouse adenovirus type 1 pathogenesis. *Virology* 380:182-190, 2008.

Anderson VE, Nguyen Y, Weinberg JB: Effect of allergic airways disease on mouse adenovirus type 1 respiratory infection. *Virology* 391:25-32, 2009.

Nguyen YN, Procario MC, Ashley SL, Gendler SJ, O'Neal WK, Pickles RS, Weinberg JB: Effects of Muc1 deficiency on mouse adenovirus type 1 respiratory infection. *Virus Research* 160:351-359, 2011.

Procario MC, Levine RE, McCarthy MK, Kim E, Zhu L, Chang CH, Hershenson MB, Weinberg, JB: Susceptibility to acute mouse adenovirus type 1 respiratory infection and establishment of protective immunity in neonatal mice. *J Virol* 86:4194-4203, 2012.

Service: Dr. Weinberg was appointed as the associate program director of the pediatric infectious diseases fellowship program in 2009 and program director in 2011. His clinical duties include spending two months per year on the pediatric infectious diseases consult service and one half-day per week for approximately 30 weeks per year in the pediatric infectious diseases and immunology outpatient clinic. Dr. Weinberg provides service to the institution in a number of areas that reflect his involvement in teaching, patient care, and research. As program director of the pediatric infectious diseases fellowship program, he has made substantial contributions to curriculum development, and he has led the division's successful recruiting efforts during a transition to a national match system for pediatric infectious diseases fellowship programs. On a departmental level, he is a member of the Residency Selection Committee and has served as the faculty mentor for six pediatric residents. He is a member of the Department of Pediatrics Research Advisory Committee, serving as interim chair of the committee in 2011. He has served as chair of the Department of Pediatrics Research Symposium in 2011 and 2012, contributing to the Symposium's successful growth as a showcase for research in the Department of Pediatrics. In the Department of Microbiology and Immunology, Dr. Weinberg has served on the Appointment, Promotions, and Awards Committee and the Graduate Studies Committee. He is the faculty coordinator for the Pediatric Infectious Diseases Journal Club and the Virology Journal Club. He serves as a pediatric infectious diseases representative on the UMHS Microbiology Laboratory Strategy Working Group, and he assisted in the development of clinical practice guidelines on the Pediatric Hematology/Oncology Fever & Neutropenia Working Group and the Primary Immunodeficiency Clinical Practice Guideline Working Group. On a national level, Dr. Weinberg is a charter member of the Infectious Disease Society of America's IDSA Journal Club and contributes to the NACHRI Collaborative to Eradicate Bloodstream Infections as a member of the University of Michigan's CA-BSI Eradication Team. Lastly, he serves on the Membership Committee of the American Society for Virology.

#### External Reviewers:

Reviewer A: "Dr. Weinberg's work bridges the fields of virology, immunology, and respiratory physiology and is highly significant....Collectively, his work is bringing clarity to adenovirus-host interactions and likely will illuminate new therapeutic targets for a variety of respiratory pathogens."

Reviewer B: "Dr. Weinberg's achievements in the area of scholarly activity are highly impressive. He has made fundamental and important research contributions, he has established a

productive research program, and he is well regarded at the national level....In the areas of teaching and professional service, Dr. Weinberg is equally successful. He has broad teaching exposure at Michigan in both basic sciences and clinical areas. He has received several awards for excellence in teaching."

Reviewer C: "Dr. Weinberg's national prominence is shown by his invitations to speak at research institutions around the country, as well as internationally. In addition, he has served as a mentor to numerous graduate students and post-doctoral fellows at the University of Michigan community, revealing his willingness and the generosity of his time and talents to help train the next generation of scientists."

Reviewer D: "...Dr. Weinberg is an extremely talented and a well accomplished Physician Scientist who has already made significant contribution to the field of prostaglandins and immunity. Given his commitment and dedication I am confident that Jason will continue to do outstanding work which will have a major impact in years to come."

Reviewer E: "He has established a reputation nationally as an outstanding pediatric physicianscientist. I also was on the council of the Society for Pediatric Research (SPR) when Dr. Weinberg was elected to join this society in 2006. Election to SPR demonstrates national peer recognition of scientific excellence, and is an important milestone in the career development of academic pediatricians across the United States."

Reviewer F: "...Dr. Jason Weinberg has developed a superb independent research program and is making important contributions to our understanding of the pathogenesis of respiratory viral infections. In addition, he has been an active educator and mentor and is having a significant impact on developing the next generation of investigators and clinicians."

## Summary of Recommendation:

Dr. Weinberg has achieved national stature for his research and has contributed greatly to the educational mission of his department. I am pleased to recommend Jason B. Weinberg, M.D. for promotion to associate professor of pediatrics and communicable diseases, with tenure, Department of Pediatrics and Communicable Diseases, and associate professor of microbiology and immunology, without tenure, Department of Microbiology and Immunology, Medical School.

James O. Woolliscroft, M.D.

Dean

Lyle C. Roll Professor of Medicine