

School of Medicine

February 16, 2024

To: UMKC Provost Jennifer Lundgren

Re: Mary Anne Jackson, MD

Dear Provost Lundgren,

I am writing to you as I will be retired from the SOM on March 11, 2024 and would like to request Emeritus status.

I am a 1978 graduate of the UMKC School of Medicine. Following medical school, I completed pediatric residency at Cincinnati Children's, and pediatric infectious diseases fellowship at the University of Texas Southwestern, before joining the faculty at Children's Mercy Kansas City in 1984. I am the first dean who is a graduate of our medical school and was honored with the E. Grey Dimond Take Wing award in 2012 in recognition of excellence in the practice of medicine. I was one of only 28 women (18%) deans across the country at the time my tenure started.

I have been a faculty member at the School of Medicine, at Children's Mercy hospital since 1984, promoted to Professor in 1996. I led the Division of Infectious Diseases from 1996-2018, where I laid the framework for research that focuses on clinical descriptions of important or emerging pediatric infections, strategies to reduce the incidence of hospital acquired infection, judicious use of antibiotics, treatment of antibiotic resistant infection and vaccine implementation and education. During these years, I have taught and mentored with thousands of medical students, residents, fellows and faculty.

Throughout my over 40-year career as an expert in pediatric infectious diseases, I have participated in Phase I, II and III industry sponsored vaccine and drug trials, providing pediatric specific vaccine immunogenicity, safety and efficacy data as well as pediatric-specific pharmacokinetic data. Beginning in 2008, I participated in vaccine trials as a co-investigator in our institution's NIH sponsored Vaccine Treatment and Evaluation Unit as well as a member of the CDC sponsored National Vaccine Safety Network. My roles through the years in research have run the gamut from scientific design of the study, analysis and interpretation of data, and drafting and ensuring the integrity of the research.

My work has resulted in more than 200 publications that have been cited over 21,000 times in the literature (h-index 60). My early publications described the role of Group A streptococcus (GAS) as an agent of toxic shock syndrome and in a separate manuscript outlined the clinical spectrum of disease including life threatening complications associated with varicella virus infection in healthy children. The publication which described the spectrum of disease in children related to GAS identified common invasive infection features and described clinical disease which supported the potential role of GAS in toxin associated disease presentations. While *Staphylococcus aureus* associated toxic shock syndrome in menstruating women had been described more than a decade earlier, our study was one of the very first to outline the role of GAS in a toxic-shock like syndrome. Varicella was regarded as a benign and normal event of childhood up until our report describing life threatening disease in otherwise healthy children. In categorizing infectious and non-infectious varicella complications, our study was most

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important in spotlighting the emerging role of GAS as a cause of necrotizing fasciitis complicating the course in children with varicella. Our study spurred on additional studies which confirmed the therapeutic utility of acyclovir for healthy children with varicella. Finally, ours was one of several studies that ultimately triggered work into the development of varicella vaccine which became a routine part of childhood immunization schedule in 1995. My work on diagnosis and treatment of Kawasaki Disease was included in the updated scientific statement for health professionals from the American Heart Association where I was co-author.

My subsequent work has continued on the theme of describing the epidemiology of common infectious pathogens with a focus on the timely diagnosis and the clinical description of emerging pathogens. The study of tickborne infections in children was undertaken with a network of children's hospitals in the Rickettsia rickettsiae belt, and produced the largest and most contemporary description of this potentially fatal childhood infection. We further defined clinical and laboratory features of ehrlichiosis in children, again, one of the first and most comprehensive publications describing infection with Erhlichia chaffeensis. With my collaborators in the microbiology laboratory, we were able to describe the utility of newer molecular methods in confirming the diagnosis of summer outbreaks of meningitis. While enteroviruses were regarded as the likely cause of summer episodes of aseptic meningitis, up until our study, diagnosis rested with viral culture, which had limited sensitivity and generally required 3-8 days, our study one of the first to show that the rapid turn-around time of PCR allowed timely diagnosis and shorter hospital stays for such patients. Our prior work that focused on characterizing the typical clinical disease presentations and seasonality of enteroviruses, allowed us to be the first children's hospital in the United States to identify the role of enterovirus D68 (EV D68) as a cause of life threatening respiratory tract infections in children. While this virus was described nearly 4 decades ago, only small clusters of disease had been previously reported. Our identification of the clinical and laboratory features of EV D68 and the subsequent report with our CDC collaborators, ultimately defined EV D68 as a cause of the largest outbreak ever reported caused by this agent. Our team also was one of the first to identify the important features of human parechovirus infection in neonates including a description of childhood outcomes from an infected infant cohort.

Vaccines are regarded as the most important achievement of the 20th century yet barriers that prevent full utilization of vaccines in the 21st century remain, resulting in thousands of cases annually in the US of vaccine preventable infections and the persistence of many diseases in developing countries. In investigation of such barriers, my colleagues and I undertook a study which defined healthcare worker knowledge, and attitudes regarding influenza vaccine. By identifying such beliefs, we were able to construct online tutorials in an educational module developed for the American Academy of Pediatrics to dispel common myths and raise the awareness of the importance of influenza vaccine in healthcare workers. As one of the 8 NIH sponsored Vaccine Evaluation with the University of Iowa, our participation was approved based on the body of research performed by myself and my colleague, Dr. Christopher Harrison. One of our first studies led to rapid implementation of H1N1 influenza vaccine in children and highlighted our institutions' capacity to successfully participate in this important vaccine related research. My recent publications highlight the role of Streptococcus pneumoniae as a health burden in children and adults and the success of varicella vaccine in reducing disease to the point that healthcare professionals trained today may not recognized typical disease. I have also collaborated with Drs. Jannette Berkley Patton and Bridgette Jones underscoring the health disparities unmasked by the COVID 19 pandemic and in a separate paper, with a group of trainees, we outlined the educational challenges navigated by medical students during the pandemic.

I have held a number of national leadership roles. As an associate editor of the Red Book 2015 and the 2018 edition, and past member of the American Academy of Pediatrics Committee on Infectious Diseases, I also have the unique opportunity to identify changing epidemiology of vaccine preventable infections and for infections that are candidates for vaccine development. I was an appointed member of the National Vaccine Advisory Committee between 2017-2020, co-authoring the manuscript on increasing accessibility to HPV vaccines and responding to vaccine disparities in the United States.

My tenure as dean extended from pre-pandemic, through the pandemic and post pandemic where this medical school not only survived but thrived. We have been recognized as a nationally ranked school and this past year we were the recipient of the American Association of Medical Colleges Spencer Foreman Award for Outstanding Community Engagement. We have worked on additional strategies to increase student enrollment, increase student and faculty retention and to increase our rankings in the USNWR survey. Highlights of work during my tenure include efforts to promote recruitment and retention of a diverse student body and faculty, to launch a rural campus to serve the rural residents of Missouri, to inspire changes in an already innovative curriculum and to promote a vibrant discovery enterprise for their MD degree programs, the Master's in Science Physician Assistant, the Master's in Science Anesthesia Assistant and Graduate Health Education programs. Research proposals and funding increased by more than 500% during my tenure as new faculty came on board to strengthen our already established achievements in vison science, neuroscience, perinatal health, cardiovascular and metabolic medicine, surgical safety, and health equity. Plans to launch a 7-year combined biomedical engineering-MD program are in progress and we would be one of only 3 such programs in the country. The faculty student scholar program in patient safety and the Mindful Practice of Medicine curriculum are also distinguishing points of pride for our school, as they are considered unique and innovative, and a model for other schools.

I plan to continue to be an advocate for the medical school, mentoring and connecting those who are contemplating careers in medicine. In my role as the Special Advisor on Health Affairs, I will be working on special projects and initiatives that benefit the SOM at the request of the Chancellor. Please let me know of any other questions you may have.

Sincerely,

Mary Anne Jackson, MD, FAAP, FPIDS, FIDSA

Dean and Professor of Pediatrics

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