Stephanie A. Fritz, MD, HS ’07, MSCI ’08, associate professor of pediatrics at Washington University School of Medicine, is filling major knowledge gaps with her creative studies of community-associated methicillin-resistant Staphylococcus aureus (MRSA) infection in children. She is also a highly regarded and beloved clinical research mentor.

Fritz leads a multidisciplinary, translational research team; her own work involves studying MRSA-affected families in their homes. In a logistical tour de force, her skillful team amassed a huge collection of samples from household members and pets along with extensive longitudinal health and behavioral data. They first showed that treating household members in addition to a MRSA-infected child can halve skin infection rates. They then looked at how hygiene, behavior, and surfaces contaminated with MRSA converge to promote reinfection. The most important household reservoirs for the bacterium proved to be bed linens, TV remote controls, and bathroom hand towels. This work has directly impacted the daily management of one of the most important epidemics of our time.

Leading several trials, Fritz also asked whether the diverse approaches that physicians prescribe (such as nasal ointments) actually eradicate MRSA. An important finding was that such treatments must target several parts of the body because, as Fritz had already shown, MRSA thrives in the groin and armpits as well as the nose. These trials have directly informed current recommended approaches to the prevention and treatment of MRSA infections in children.

Fritz is now looking at the effects of treatments such as systemic antibiotics on the microbiota of the skin. Through genomic analysis of microbiome samples, she aims to find innovative ways to prevent MRSA colonization by encouraging the growth of healthy microbes, which are sometimes eliminated during treatment with antibiotics.

She has been recognized with election to the Society for Pediatric Research, a Young Investigator Award from the Pediatric Infectious Diseases Society, and a Faculty Scholar Award from the Children’s Discovery Institute of Washington University and St. Louis Children’s Hospital.

Fritz obtained her bachelor’s degree at the University of Wisconsin in 1997 and her medical degree at the Medical College of Wisconsin in 2001. She completed her pediatric internship and residency at the Children’s Hospital of Wisconsin. From 2004 to 2007, she was a fellow in pediatric infectious diseases at Washington University, where she subsequently earned a master’s degree in clinical investigation and joined the faculty in 2008.

The Washington University Medical Center Alumni Association is pleased to present its Resident/Fellow Alumni Achievement Award to Dr. Fritz.