Postdoctoral Scientist Position Available in Microbial Pathogenesis

Center for Microbial Pathogenesis (CMP): King Laboratory
Abigail Wexner Research Institute
Nationwide Children’s Hospital
The Ohio State University,
Columbus, OH, United States

Position. We are seeking an enthusiastic and organized critical thinker to join our research group. Our studies focus on streptococcal interactions with host glycan structures. These interactions are critical in colonization of the oral cavity and development of infective endocarditis. We are looking for someone with experience in a range of molecular biology and biochemical skills including bacterial mutagenesis and protein expression. Experience with bacterial binding assays, microscopy, and bioinformatics is a plus. Successful applicants will be expected to present their work and contribute to the preparation of manuscripts. While we are advertising for a Postdoctoral scientist, we would also be willing to hire an experienced research associate. For more information, please reach out to Dr. King at Samantha.King@nationwidechildrens.org. We will assess applications upon receipt and keep the position open until it is filled.

Research Interests. The King lab studies viridans group streptococci with a focus on the oral pioneers and leading causes of infective endocarditis Streptococcus oralis and Streptococcus mitis. Our studies aim to explain how these bacteria bind to oral surfaces and interact with other oral species leading to the formation of dental plaque, which is directly associated with dental caries and periodontitis. In addition, we are defining how these adhesion mechanisms contribute to endothelial binding and vegetation formation during infective endocarditis. A greater understanding of how these bacteria bind and communities form will provide opportunities to improve health and reduce the burden of disease.

Environment. Our team is part of the Center for Microbial Pathogenesis (CMP) at the Abigail Wexner Research Institute at Nationwide Children’s Hospital, which exists to answer questions that will improve the early diagnosis, treatment, and outcomes of society’s most important diseases by combining high-quality, fact-based lab discoveries and innovative patient-based research. The Research Institute is ranked among the top 10 for NIH funding among free-standing children’s hospitals. The CMP participates in the Infectious Disease Consortium which includes all research scientists and clinicians at Nationwide Children’s Hospital with an interest in infectious disease. The consortium hosts regular meetings to discuss research progress and ideas and hosts an annual retreat. In addition, Dr. King is a Thematic Program Director for Host Defense and Microbial Biology within the Infectious Diseases Institute, which is hosted on the main Ohio State University campus less than 5 miles from Nationwide Children’s Hospital. This multidisciplinary research center brings together faculty that focus on a wide range of different aspects of infectious disease research. The breadth of expertise of these faculty provides an invaluable resource. The center hosts a high caliber external speaker seminar series, an annual retreat and additional resources to support infectious disease research. As a result of the high concentration of researchers studying host-pathogen interactions the Research Institute is a very strong and supportive environment in which to conduct such research.