

Office of Faculty Development

Pathology & Immunology



Matthew (Matt) Hibberd, PhD grew up in Scottsbluff, Nebraska, and spent many summers working at the local University of Nebraska agriculture research station for the Entomology and Plant Pathology Departments. Some of his earliest research exposure was to biological control of plant pathogens, an ecological concept that would prove valuable later in his research career. He studied Biochemistry, also at the University of Nebraska - Lincoln as a Regents Scholar, graduating summa cum laude, with honors. As an undergraduate, he was heavily involved in a Monsanto-funded research project in the lab of Donald P. Weeks,

PhD, studying the bacterial molecular mechanisms of breakdown of the herbicide Dicamba, and spent an additional summer term as an intern at AgTech Products, Inc., a startup in Waukesha, WI, studying enteric diseases of production livestock.

After graduating from UNL, Matthew accepted a full-time Project Scientist position at AgTech, continuing research and development efforts to design microbiologically-based therapeutic strategies for livestock applications as alternatives to traditional antibiotic-based interventions. It was during this time that he developed his skills in anaerobic microbiology and microbial ecology, along with a passion for the application of these techniques to understanding health and disease in the mammalian gut. That passion led Matthew to pursue his graduate studies at WUSM (Molecular Microbiology and Microbial Pathogenesis) in the lab of Jeffrey I. Gordon, MD, where he further blended his microbiological expertise with bioinformatic analyses while exploring interactions between dietary micronutrients of global health significance and bacterial members of the gut microbiota. Contemporaneous work in the Gordon Lab to develop Microbiota-Directed Complementary Foods (MDCFs) for the treatment of childhood malnutrition, supported by the Bill and Melinda Gates Foundation, provided a unique opportunity to translate nutritional therapeutic strategies designed in the lab using gnotobiotic animal models, model microbial communities, next-generation sequencing techniques, and high-performance computing to real-world applications. On completion of his graduate studies, Matthew was excited to continue his work with Dr. Gordon as an Instructor to explore MDCF efficacy in malnourished Bangladeshi children through a close partnership between the Gordon Lab and researchers and physicians at the International Center for Diarrheal Disease Research (icddr,b).

Matthew is a microbiologist at heart, but enjoys the application of sequencing and computing technologies to basic and translational research. He is particularly inspired by his colleagues domestic and abroad, and enjoys his mentoring and teaching roles deeply.