Dr. Melanie Yarbrough was born and raised in Ennis, a small Czech community in the Prairies and Lakes region of Texas.

She grew up on a small farm, where she spent her time raising beef cattle, fishing, and exploring. These experiences led her to apply to Texas A&M University on a scholarship from the Future Farmers of America, where she majored in Biomedical Science with the goal of becoming a veterinarian. During her time there, the university became the first institution to successfully clone a cat, so she knew she had come to the right place. It was while working in a laboratory at the Texas A&M University College of Veterinary Medicine where she realized she preferred to study animals on a molecular level.

Melanie chose to pursue graduate training at the University of Texas Southwestern Medical Center in Dallas in the laboratory of Dr. Kim Orth. It was in graduate school that she met her future spouse, Anthony Orvedahl. In 2009, she earned a PhD in Molecular Microbiology for her work in type III secreted effector proteins from *Yersinia* and *Vibrio* bacteria. Using mass spectrometry, she ultimately discovered a novel post-translational modification catalyzed by one of these bacterial enzymes that facilitated bacterial perturbations of host cell signaling to promote remodeling of the actin cytoskeleton. With her foundation of knowledge in both biochemistry and microbiology, Melanie went on to complete dual fellowship training in Clinical Chemistry and Medical and Public Health Microbiology at Washington University in St. Louis and is board certified in both disciplines.

She brought this unique skill set to the Department of Pathology and Immunology when she joined the faculty in June 2017. She currently serves as an Assistant Medical Director of Clinical Microbiology and the Medical Director over Urinalysis testing at Barnes-Jewish Hospital. She is actively involved at the BJC system level as the Clinical Microbiology Liaison to several community hospitals served by the BJH microbiology laboratory. In this capacity, she enjoys participating on multidisciplinary teams and using a variety of approaches to optimize diagnostic test utilization and improve provider understanding of laboratory results.

Her clinical research interests intersect within the boundaries of clinical chemistry, microbiology, and molecular diagnostics. She has focused on evaluating methods for isolation and identification of urinary pathogens, including multi-drug resistant organisms. She is interested in gaining a better understanding of the influence of microbiota of the genitourinary system on disease, with a particular focus on infectious diseases that affect women's reproductive health.

Melanie is married to a physician scientist in Pediatric Infectious Diseases whose deep interests in autophagy and the innate immune response makes for "interesting" conversation around the dinner table. Thankfully, his excellent bartending skills help keep the conversation flowing! They have a 6-year-old son, Henry, who enjoys playing video games, jumping on furniture, playing soccer and basketball, and playing more video games. Favorite family activities include hiking, playing board games, and dancing in the parlor of their home for their neighbors' entertainment. When she is not listening to endless Minecraft tutorials given by her son, she enjoys reading historical fiction, learning how to garden, and trying to find the best Mexican food in Saint Louis.