James E. Crowe, Jr., MD

Dr. Crowe is Professor of Pediatrics (Infectious Diseases), Pathology, Microbiology and Immunology, Ann Scott Carell Chair, and Director of the Vanderbilt Vaccine Center. His laboratory studies the molecular, genetic, and structural basis of human immune responses to virus infection or vaccination. He has studied antibody-mediated immunity to a wide variety of viral pediatric pathogens, including RSV, MPV, influenza, rotavirus and norovirus, and also agents of bioterror and emerging infectious diseases, including chikungunya virus, dengue viruses, Ebola and Marburg viruses, Zika virus and others. His group is working to develop new methods in computational immunology for rational design of vaccines and antibodies. He is the Director of the Human Immunome Project, an ambitious effort to identify the sequence of all transcripts for adaptive immune receptors on the planet. He is an elected member of the National Academy of Medicine and has been the recipient of a number of major investigator awards for research, including the Samuel Rosenthal Foundation Prize in Academic Pediatrics, the E. Mead Johnson Award for Excellence in Pediatrics, the Norman J. Siegel Award of the American Pediatric Society, the Judson Daland Prize of the American Philosophical Society, the Oswald Avery Award of the IDSA, the Outstanding Investigator Award of the American Federation for Medical Research and others. He is an elected Fellow of the American Academy of Microbiology, the American Association for the Advancement of Science, the American Society for Clinical Investigation, the Association of American Physicians, the Infectious Diseases Society of America, the American Pediatric Society, and others.