

Dr. Thomas J. Inzana

Dr. Thomas J. Inzana is the Tyler J. and Frances F. Young Chair of Bacteriology in the Virginia-Maryland College of Veterinary Medicine at Virginia Tech, and the associate vice-president for research programs in the Office of the Vice-President for Research. He is also the director of clinical microbiology for the College of Veterinary Medicine's Teaching Hospital. In addition, from 1998-2002, Inzana served as coordinator of the Center for Molecular Medicine and Infectious Diseases. During his career, Inzana has also served as a visiting professor at the University of Pennsylvania School of Medicine and SUNY at Buffalo School of Medicine. Inzana's research interests are the development of improved vaccines and diagnostic tests for bacterial pathogens and biowarfare agents, investigation of the molecular basis of capsules and lipopolysaccharides in bacterial virulence, and the host immune response to bacterial pathogens. Inzana and colleagues developed a live attenuated vaccine for swine pleuropneumonia, which is commercially available from Boehringer-Ingelheim Vetmedica as APP-ALC, to control disease due to *Actinobacillus pleuropneumoniae*. His current research focuses on understanding the role of bacterial virulence factors in pathogenesis and host response, and the development of subunit and live vaccines to prevent tularemia and glanders due to the select agents *Francisella tularensis* and *Burkholderia mallei*, respectively. Inzana's group in collaboration with Dr. Randy Heflin in physics is also developing antibody and DNA-based nanoparticle biosensors to diagnose these agents. Inzana's group is investigating the *in vivo* development and function of *Histophilus somni* biofilm formation in the bovine host during pneumonia, myocarditis, and other systemic infections to develop new treatments to prevent biofilm formation, and as a model to study human biofilm infections. Inzana is board certified by the American Board of Medical Microbiology and Public Health and is a Fellow of the American Academy for Microbiology. He is a member of the American Society for Microbiology, the American Association of Veterinary Laboratory Diagnosticians, the Conference of Research Workers in Animal Diseases, and the International Endotoxin and Innate Immunity Society.