

UAB Investigators Studying Pneumococci

David E. Briles, Ph.D. discovered PspA, investigates the mechanism of action of pneumococcal proteins, animal models of pneumococcal disease, biology of pneumococcal infections, and potential roles of pneumococcal proteins in pneumococcal vaccines. His research is further described at <http://www.microbio.uab.edu/faculty/briles/>

Moon H. Nahm, M.D. studies structure and function of pneumococcal capsules and the roles that antibodies to capsule have in protecting against pneumococcal diseases. He also investigates the role of lipoteichoic acid in pathogenesis. His research is further described at <http://www.microbio.uab.edu/faculty/nahm/index.html>

Alex Szalai, Ph.D. studies the roles of complement and CRP in protection against pneumococcal infections. He also studies the varied mechanisms that these host proteins play in the generation of adaptive and innate immunity to pneumococci, as well as the various processes CRP and complement play in pneumococcal pathogenesis. His research is further described at <http://scholars.uab.edu/display/sandor>

Janet Yother, Ph.D. studies the genetics and biochemistry of pneumococcal capsule synthesis and also studies the specific roles of capsule in virulence and colonization and the relevant interactions of capsule with other virulence factors. Her research is further described at <http://www.microbio.uab.edu/faculty/yother/index.html>

Hui Wu, Ph.D. focuses on using oral streptococci as a model to investigate how bacteria-host interactions contribute to health and disease. He has also studied protein glycosylation and secretion important in pneumococcal pathogenesis. His research is further described at <https://labs.uab.edu/hwu/>

Carlos Orihuela, Ph.D. focuses on the host-pathogen interactions that underlie development of invasive pneumococcal disease. These include examining the role of necroptosis on pulmonary injury during bacterial infection, exploring the molecular basis of cardiac invasion during bacteremia, and dissecting how the toxin pneumolysin kills host cells. His research is further described at <https://apps.medicine.uab.edu/facultydirectory/iFacultyData.asp?FID=74213>