Interactions Between α-hemolysin and the Respiratory Mucosa Pat Schlievert (PI) and Kristi Strandberg Department of Microbiology, University of Minnesota

DESCRIPTION OF WORK

- α-hemolysin is an exotoxin known to form pores in several cell types, however, its effects on bronchial epithelial cells is unknown.
- Immortalized bronchial epithelial cells were exposed to purified staphylococcal α-hemolysin for 24 hours then viewed using SEM to determine the effects of α-hemolysin on the epithelial cell surface.

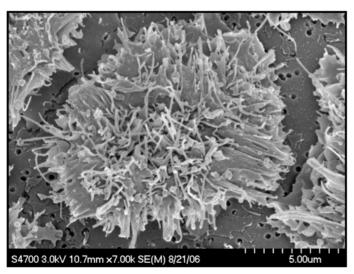


Figure 1. SEM imaging of immortalized bronchial epithelial cells

MAJOR OBSERVATIONS

 Exposure to α-hemolysin induces membrane damage and cell sloughing in immortalized bronchial epithelial cells.

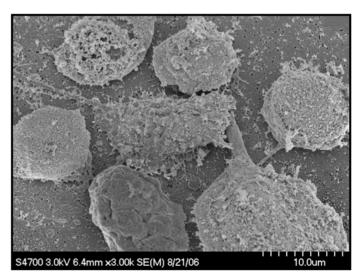


Figure 2. SEM image of immortalized bronchial epithelial cells exposed to α -hemolysin (1ug/ml) for 24 hrs

