

**Interaction of Reovirus with a Human Monocyte Cell Line**

Airway inflammation is observed when reovirus serotype 1 Lang (T1L) or serotype 3 Dearing (T3D) is administered in a reovirus pneumonia model in the rat; however, T3D causes more prominent inflammation than T1L. Previous studies have shown that inflammatory molecules are stimulated in a rat alveolar macrophage cell line by reovirus. The goal of this study is to determine if virus serotype differences compared to differences in inflammation are seen in vivo. Cells have been treated with T1L at multiplicity of infection (MOI) of 10 and 100, as well as medium alone. After 24, 48, and 72 h, cell viabilities and viable cell number were determined and plaque assays were done to determine the effect of viral replication. Another set of THP-1 cells will be treated with T3D and observed in the same manner as the T1L. All data collected will be analyzed by a student's t-test as well as analysis of variance (ANOVA) where appropriate. The results will provide further insight into the response of the host response to reovirus.