Viral Respiratory Infections: RSV and Paramyxoviruses

DATE: Wednesday, April 3, 2019 – 8:30 am

READING ASSIGNMENT:

Murray Medical Microbiology, 7th Edition, Chapter 56.

EDUCATIONAL GOAL:

You will be able to identify the diseases associated with paramyxovirus infection, how paramyxoviruses are transmitted and the role of antibodies in treatment and vaccination in controlling the spread of these viruses.

KEY CONCEPTS AND LEARNING OBJECTIVES:

To attain the goal of this lecture you will be able to:

- Describe the major diseases associated with respiratory syncytial virus (RSV), metapneumovirus, and parainfluenza virus infection.
- Describe the cytopathic effect (CPE) that is characteristic of paramyxovirus infection
- Describe a new approach for developing an epitope-based vaccine for RSV
- List the six components of the virion of the paramyxoviruses and describe the function of each component
- State the first step in RNA synthesis of paramyxoviruses and describe how it differs from replication of positive strand RNA viruses